

The New Silk Road

Facilitating interaction between global and local within the Belt and Road Initiative.

Master thesis

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TU Delft
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The New Silk Road

Facilitating interaction between global and local within the Belt and Road Initiative.

Summary

At times of political unrest and dynamic changes in the world, China puts forward a proposal for global collaboration towards a win-win collaboration - the Belt and Road Initiative (BRI). The plan is promoted to the global community as the revival of the Ancient Silk Road, but in fact, it is an infrastructural megaproject unfolding with a tremendous speed, unlike the millennia it took for the Silk Road to take shape. The danger of such globalisation-driven developments is that they strain the social cohesion of local communities, creating environments that do not meet the needs.

Since its announcement in 2013, the Belt and Road Initiative has been an emerging topic of media coverage and academic research in the fields of economy and international relationships. However, it is striking that over the past five years in which the BRI-literature emerged, this topic has not yet been discussed in the field of urban planning and design. One of the aims of this thesis is to provide urban planners and designers with understanding about what China's recent Belt and Road Initiative exactly is about, and reframe it as a set of problems that the field of urbanism could actively address.

The starting point of this thesis is the critique of the infrastructure centred approach observed from the BRI's first developments. Initial hypothesis assumes that new urban developments will get a subservient role to infrastructure and economy, resulting in large-scale uniform environments. The critique in the thesis concerns the means by which the BRI claims and attempts to facilitate a win-win collaboration for all. The infrastructure oriented top-down approach the BRI handles so far in the realisation of the projects is not enough to truly connect people and set them up for durable interaction and collaboration.

To test the hypothesis, the research takes the first BRI-development - Khorgos Gateway, at the border of China and Kazakhstan, as a case, to study how the global developments and the local context interact with each other. As the brand-new

Khorgos Gateway has not yet been documented, most research data for this research has been collected from online media, observations and interviews conducted during a two-week field study.

The case study confirms the hypothesis, showing that Khorgos Gateway, a product of top-down development designed to benefit global trade, fails to attract new population losing it from the established towns and megapolises in the region. The transformative potential of BRI remains unfulfilled as long as social and urban needs of the local context are left out of consideration.

The main objective of the design is to facilitate interaction between the global and local contexts. The design proposal builds upon the existing International Centre of Border Cooperation (ICBC), an element of the Khorgos Gateway programme. In the first place, the design aim is to embed the ICBC functionally and spatially in the local context creating a symbiosis between the new development and its surrounding. To do so five development goals are set for the ICBC and are translated into strategies and implementations across local, regional and trans-territorial scales. Secondly, this thesis proposes to establish an international network of ICBC's as places where local and global communities can meet to exchange culture and share knowledge. An evaluation and assessment framework is presented as a tool to assist the process of transferring and adapting the ICBC concept to other locations.

The aim of this work is to spark interest, discussion and further research within the urbanism community. This thesis is of explorative nature, aimed to sketch a socio-spatial frame of reference on the Belt and Road as a phenomenon, and serves as a starting point of a more systematic and theoretical research.



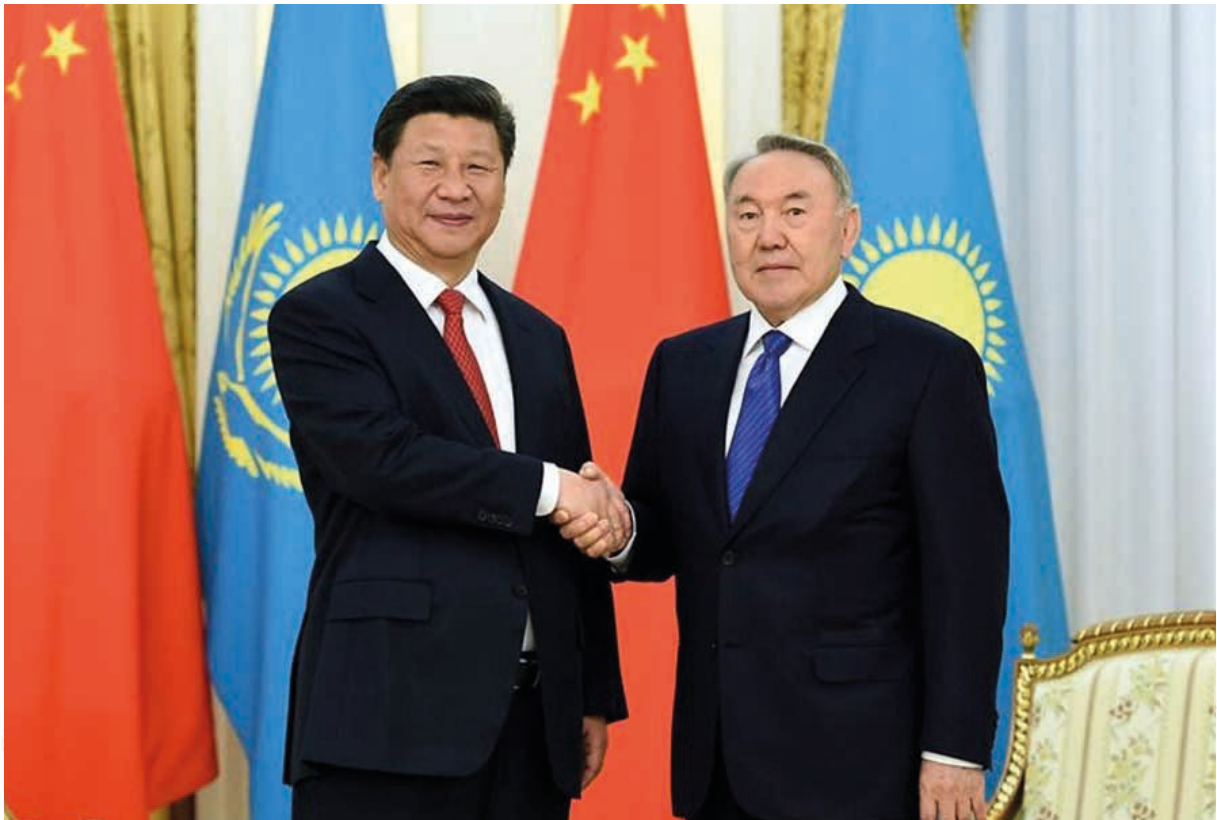
“The Silk Roads were no exotic series of connections, but networks that linked continents and oceans together. They were - and still are - the world’s central nervous system. This is where empires were won - and where they were lost. As a new era emerges, the patterns of exchange are mirroring those that have criss-crossed Asia for millennia.

The Silk Roads are rising again.”

- *Peter Frankopan, The Silk Roads (2017).*

President Xi Jinping Delivers Important Speech and Proposes to Build a Silk Road Economic Belt with Central Asian Countries

2013-09-07 Ministry of Foreign Affairs of PRC



“On Sept. 7, 2013, President Xi Jinping made a speech titled "Promote People-to-People Friendship and Create a Better Future" at Kazakhstan's Nazarbayev University. He spoke highly of the traditional friendship between China and Kazakhstan, and gave a comprehensive elaboration of China's policy of good-neighbourly and friendly cooperation toward countries in Central Asia. He proposed to join hands building a Silk Road economic belt with innovative cooperation mode and to make it a grand cause benefiting people in regional countries along the route.”

- Ministry of Foreign Affairs of People's Republic of China



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Reading guide

BRI - Belt and Road Initiative

ICBC - International Centre for Border Cooperation

SEZ - Special Economic Zone



1. Introduction

Motivation | Context | Problem field | Research questions | Relevance | Methodology

At times of political unrest and dynamic changes in the world, China puts forward a proposal for global collaboration towards peace and prosperity – the Belt and Road Initiative (BRI). Faced with critique, distrust and questions from the global community the plan to revive the ancient Silk Road can as easily fail as succeed, depending on the way it is executed on the local scale.

The conceptual predecessor of BRI, the Ancient Silk Routes, is set as an historic example of cooperation, trade and culture exchange. The cities along the Silk Route were the first metropolises, famed for the diversity of cultures they housed and the rich cultural identity they got as result. As such the Silk Route was a carrier of globalisation in its era, and today China hopes the BRI to be the medium for a new era of globalisation. But the times have changed, and the question is, whether the success factors behind the Silk Route back in the old days, can still be useful today, when the world turns at accelerating speeds, mixing cultures faster than our societies can adapt to, in cities that grow by the minute.



Urumqi: Buddhist temple and Eurasian highway. Image by author.

How is China's main strategy for foreign policy, the Belt and Road Initiative a research topic at the Faculty of Architecture and the Built Environment?

The Belt and Road Initiative is a geopolitical tool designed to foster a new kind of globalisation. The enterprise unprecedented in scale and complexity has attracted a lot of attention of politicians, economists and journalists. A lot is not clear yet, as the initiative is in the early stage of development. Therefore it is very hard to make solid assumptions about the impact the BRI will have in the future.

The starting point for this thesis is the fundamental fact that eventually all processes of human activities, both physical and virtual, reflect in the built environment and affect the way we use and change them. As a geopolitical tool the BRI, aims to facilitate social and economic processes through implementation of infrastructure and political agreements, this way inevitably changing the spaces in question.

Urbanism department and in particular the Complex Cities research studio focus on the complex interplay of space and society, an interplay depending on which the BRI can either fail or succeed. In line with another interest of the Complex Cities studio - the changing role of urbanism, I started off with the aim to rethink the way globalisation driven urbanisation can happen in the future. Believing that the BRI will trigger urbanisation in one way or another, I wanted to explore with this thesis what could be the alternative to the current uniform urban environments and new-towns taking over the world. In this my point was to go further than assessing the architectural expression of buildings or conserving the local environments out of critique for globalisation.

These explorations uncovered a bigger debate that all graduates of the studio deal with in

one way or another, the interaction between the local and the global. My perspective on this vast research theme revolved around the potential impact globalisation bears towards the fragile authenticity of the local context.

The starting point for my thesis is the intuitive statement that the key to a new era of globalisation lies in rethinking the urban environments that are created as a consequence. In doing so, I believe we need to take into account the multiculturalism of our societies and our lack of experience with them. In a rather short amount of time people of completely different cultural backgrounds and ethnicities started living together in big cities. Just 200 years ago the world was much more segregated both socially and spatially. Industrial and revolutions, economic globalisation brought us together much closer than our societies and cities were ready to adapt to.

Finally, the broad scope of the studio allowed to continuously reframe the problem and enrich it with new insights. In order to facilitate a mindful change on the local context, the global perspectives need to be guided too. The specifics of my project led to the exploration of more planning oriented themes like territorial collaboration which revealed itself to be in close relation to border challenges. The broad orientation and focus on planning in the studio allowed me to work towards an integrated picture, which then could translate in design solutions.

The planning oriented studio provided me with tools like vision, structural plan and strategy that allowed me to continuously explore and design across the local and global scales and understand the different roles (mediate, facilitate, connect, envision) design can have in such complex contexts.

Context



The Belt and Road Initiative. Image by author.

What is the Belt and Road Initiative exactly about?

Set-up, motives and goals

During his first state visit to Kazakhstan, in September 2013 Chinese president Xi Jinping held a speech at the Nazarbayev University with the title “Promote People-to-People Friendship and Create a Better Future” proposing a vision of to create ‘win-win collaboration [... / and] new opportunities for global development’(Ministry of Foreign Affairs of the PRC, 2013).

With this China puts forward a plan to revive the Ancient Silk Routes in a contemporary form of cross-continental economic collaboration network, in order to facilitate a new inclusive form of globalisation (Liu & Dunford, 2016). The ‘Belt and Road Initiative’ (BRI), also known as OBOR and the ‘New Silk Road’, consists of two parts: a network of logistic and economic corridors over land, and a series of sea-routes supported by new Chinese ports, essentially

strengthening China’s geopolitical position on the continent. With this the initiative covers 65 countries across six regions and potentially involves 62.3% of the world population and 30.0% of worlds GDP (Chin & He, 2016).

To support the grand scheme the Chinese government founded the Silk Road Fund, the International Asian Infrastructure Investment Bank (AIIB) and the New Development Bank (NBD). However, so far the most funding came from the state-owned China Development Bank (CBD) and four commercial banks (Ma & Wildau, 2017).

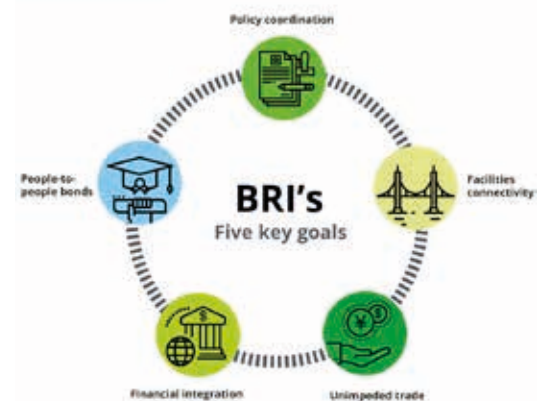
China provides loans to help other countries develop infrastructural projects such as ports, oil pipelines, power plants, highways and railways as part of the BRI. Facilitating collaboration through infrastructure China also strengthens its economic and political

Context

position on the Eurasian continent. Another important motive behind the BRI is China's wish to export its expertise in construction of infrastructure and generate business for Chinese engineering and construction companies, to support its domestic market. Nalbantoglu argues that for this reason BRI is 'essential for the survival of a stable China' (2017).

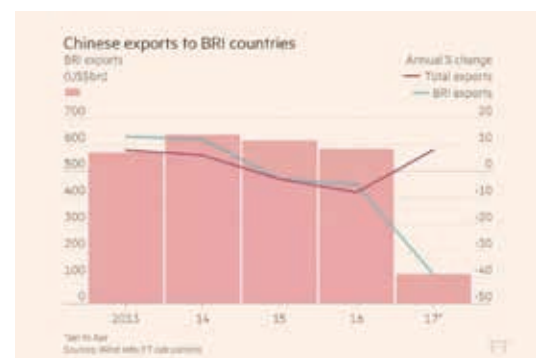
Western politics and media face the BRI with lot of critique and distrust, fearing the BRI to be a sophisticated form of colonisation. Nevertheless China firmly promotes the BRI as a vision for a better future emphasising in its campaign the benefits of all partners joining forces. The five key goals BRI sets to benefit collaboration are: 'policy coordination', 'facilities and infrastructure connectivity', 'unimpeded trade', 'financial integration and people-to-people bonds' (Y. Huang, 2016). Media and academics are divided about the degree of altruism behind China's initiative. In my opinion the BRI could definitely be of benefit to countries other than China, if the win-win principle can be secured by reinforcing it with concepts of complementarity for example (Dühr, Stead, & Zonneveld, 2007). Moreover, I think the success or failure of the BRI fundamentally depends on the way the initiative is translated into spatial terms and daily lives of people. Among BRI's five goals there are two with this potential: 'people-to-people bonds' and 'infrastructure connectivity', however what needs more explicit attention is the urbanisation that will take place as a consequence of the BRI.

Figure 1. BRI's five key goals



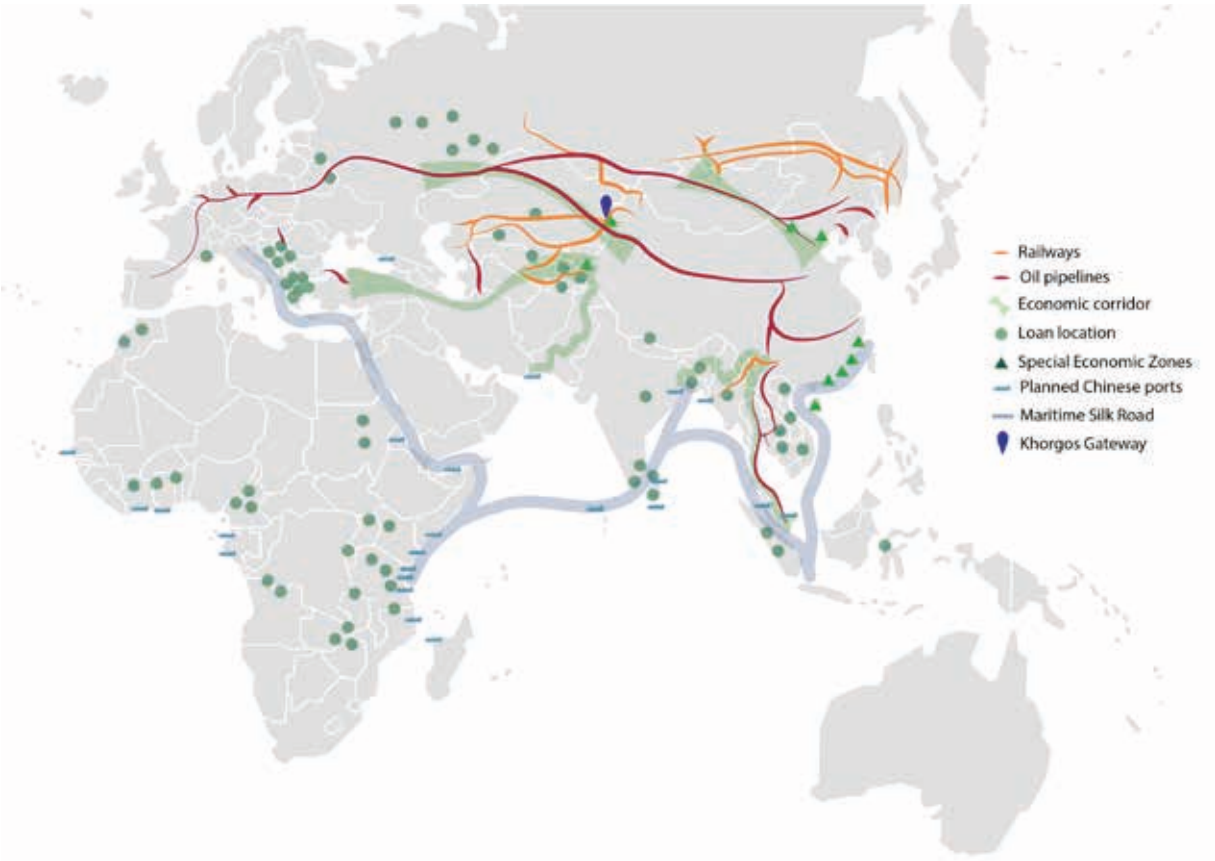
Source: Public information.

Deloitte insights | deloitte.com/insights



Source: Financial times, (Wildau and Ma, 2017)
<https://www.ft.com/content/18db2e80-3571-11e7-bce4-9023f8c0fd2e>

Context



Instruments of the Belt and Road Initiative. Image by author.

BRI Goals	COLLABORATION				
	Financial integration	Unimpeded trade	Policy coordination	Connectivity	People to people bonds
BRI Instruments	Politico-Economic Instruments			Physical Instruments	Socio-cultural Instruments
	Capital loans, Technical financial in- struments	Economic cooridors, trading agreements	Diplomatic agreements, policy programmes	Nodal infrastructures: Roads, Railways, Ports, Airports, Telecommunications networks, Pipelines, Development Zones and Cities	Silk Road cultural legacy, Educational programmes, Cultural exchange programmes, Chinese Culture Institutes.
			Special Economic Zones		

Instruments of the Belt and Road Initiative related to goals. Image by author.

How does the Belt and Road Initiative work?

Instruments for establishment of the Belt & Road Initiative

In existing literature discourse the complexity of the BRI is tackled by breaking it down into its political, economic, functional or strategic components. In my work I will explain the Belt and Road Initiative by presenting the various instruments that were designed to foster international collaboration and connectivity.

Swaine (2015, pp. 3, 4) distinguishes economic and diplomatic elements in the BRI. Liu and Dunford (2016) talk about channels of communication, nodal infrastructures and financial instruments. From financial perspective, Yu (2017) distinguishes capital loans and technical services as means to facilitate infrastructure development. Huang (2016) highlights cross-border projects as a distinct feature of the BRI and lists railways highways, pipe- and electricity lines among it. Fitting in the same sequence are also the Special Economic Zones that China actively uses to strengthen its trading relationships with neighbouring countries.

Based on literature and analysis of the BRI-developments three groups of instruments can be defined: 'politico-economic', 'socio-cultural' and 'spatial'. While the politico-economic group of instruments contributes to success of BRI on the level of governance across various scales, the 'socio-cultural' and 'spatial' groups shape the physical manifestation of the initiative. Having said this I don't want to diminish the relevance of the economic benefits for BRI's success, but I would like to emphasise that 'politico-economic' elements concern the group of actors directly involved with the initiative more, while the remaining elements potentially impact a much wider scope of actors and users.

Context



BRI Instruments - infrastructure

Among the first steps in the establishment of the Belt and Road Initiative was the construction of various infrastructure such as railways and highways.

These connections are called 'land corridors'. So far there are six land corridors:

1. The New Eurasia Land Bridge,
 2. The China-Mongolia-Russia Economic Corridor
 3. The China-Central Asia- West Asia Economic Corridor,
 4. China-Indochina Peninsula Economic Corridor,
 5. China-Pakistan Economic Corridor,
 6. Bangladesh-China-India-Myanmar Economic Corridor.
- (for more information see page 14.)

New Eurasian Land Bridge (since circa 2016)



Image by author.



Context



Source: <https://www.mnenergyservices.com/above-ground-pipelines.php>



BRI Instruments - Pipelines

Aside mobility infrastructure, BRI has a strong focus on realisation of energy infrastructure. One of the first to be constructed was Karot Hydropower plant near Rawalpindi and Islamabad. In 2018 a coal-based powerplant in Balochistan was completed.



Source: <http://pakchinanews.pk/pakistan-power-plant-to-get-coal-terminal-by-chinese-companies/>



Context



BRI Instruments - Ports

Crucial for the workings of the BRI logistic network are the sea and dry-ports. China is establishing a big amount of new sea ports to facilitate the Maritime Silk Route. At the centre of the Eurasian continent, near the Pole of Inaccessibility, the newly-constructed dry-port Khorgos is serving as a central distribution point between the seaports and the land corridors.



What is a dry-port?

A dry port is an inland port or a multimodal transportation and infrastructure hub. Usually the dry-port is in direct connection with one or several seaports with which freight is being exchanged.





Source: <http://balochistanvoices.com/2016/06/gwadar-port-source-of-potential-benefits/>

Khorgos Gateway **Dry-Port**, Kazakhstan, since 2015



Source: <http://www.atimes.com/article/atc-chinas-landlocked-port-in-kazakhstan-doesnt-need-water-to-succeed/>

Context



BRI Instruments Trade and Economy

Crucial for the workings of the BRI logistic network are the sea and dry-ports. China is establishing a big amount of new sea ports to facilitate the Maritime Silk Route. At the centre of the Eurasian continent, near the Pole of Inaccessibility, the newly-constructed dry-port Khorgos is serving as a central distribution point between the seaports and the land corridors.

Economic Instruments Special Economic Zones

Crucial for the workings of the BRI logistic network are the sea and dry-ports. China is establishing a big amount of new sea ports to facilitate the Maritime Silk Route. At the centre of the Eurasian continent, near the Pole of Inaccessibility,

What is a Special Economic Zone?

A Special Economic Zone (SEZ) is a geographically defined area where different trade laws apply than in the rest of the country.



Source: <https://eurasianet.org/s/on-china-kazakhstan-border-lies-a-lopsided-free-trade-zone#4>



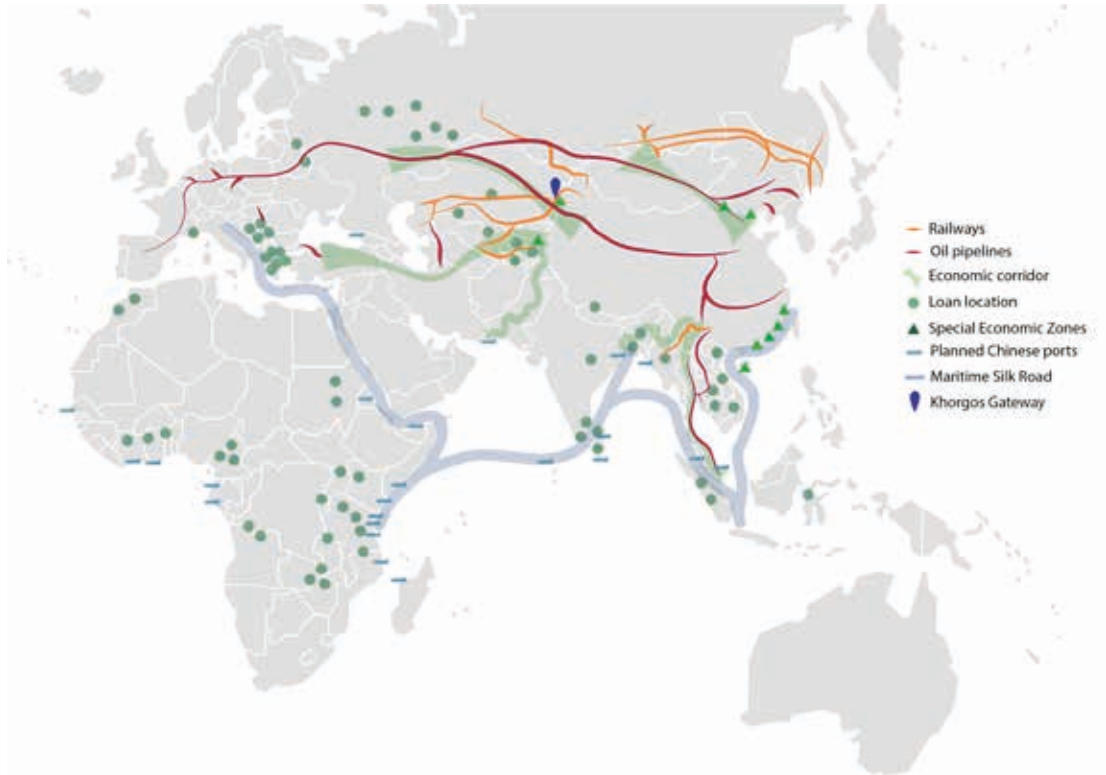
Source: <https://eurasianet.org/s/on-china-kazakhstan-border-lies-a-lopsided-free-trade-zone#11>



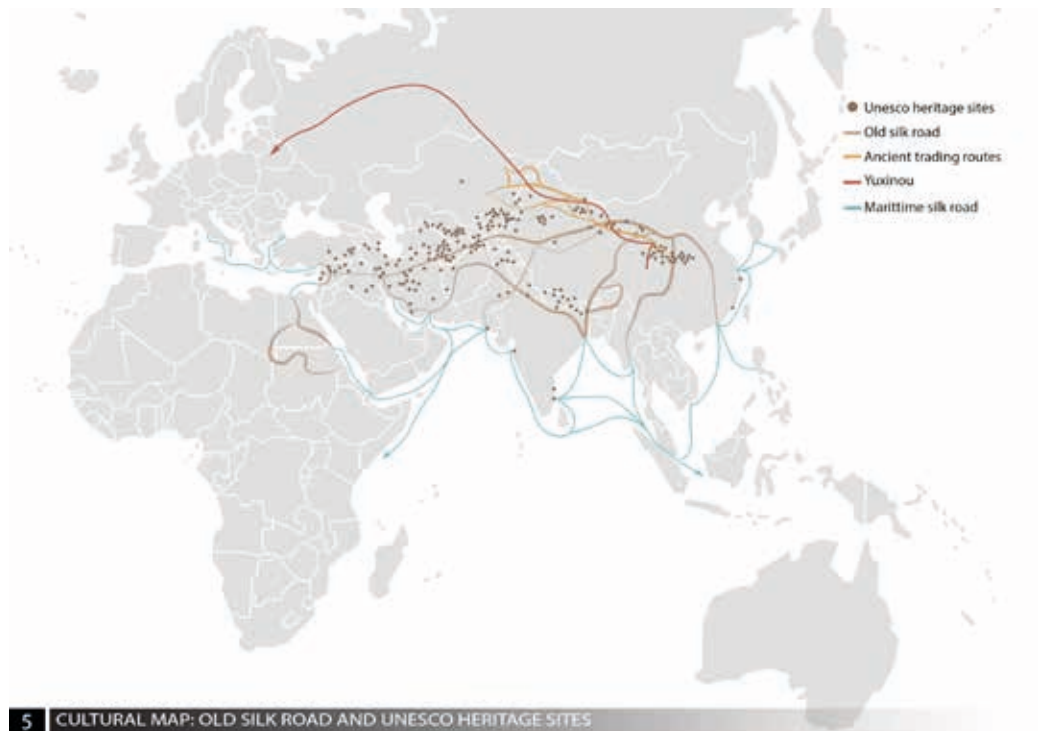
Source: <https://eurasianet.org/s/on-china-kazakhstan-border-lies-a-lopsided-free-trade-zone#11>

Context

How does the Belt and Road Initiative and the Ancient Silk Road compare?



Instruments of the Belt and Road Initiative. Image by author.





Ancient Silk Road Scenery. Source: www.tes.com/lessons/K6k4skK4TxHUNA/silk-road-project


The BRI and Silk Route Heritage

The Belt and Road Initiative brands itself worldwide as the step to revive the Ancient Silk Road. The ancient Silk Routes established over several centuries

of interaction between Europe and Asia. The Silk Road became the international symbol for trade and prosperity and is for this reason a very useful role-model in the promotion campaign for the BRI.



Belt and Road spatial manifestation. Image by author.



KHORGOS GATEWAY:
Where East meets West

BBC
NEWS

www.bbc.co.uk/news

Emerging trade hub could revive ancient Silk Road

In a remote part of Central Asia a new colossal dry port is emerging called the Khorghos Gateway. It has sprung up in the desert between China and Kazakhstan in just seven years.

The Gateway is hoping to become the key point of New Silk Road - global trade way between East and West. For centuries ancient Silk Road was the main trade way connecting China and Europe. Khorghos may revive it and completely change the logistics of exchanging goods between Asia and Europe.

But it isn't just a train station and a few warehouses, they've created a new city - with some developers claiming they're building a "new Dubai".

🕒 31 May 2017

Source: <http://www.bbc.com/news/av/world-asia-40099103/emerging-trade-hub-could-revive-ancient-silk-road>

The impacts of the Belt and Road Initiative on local context Khorgos Gateway as a study case

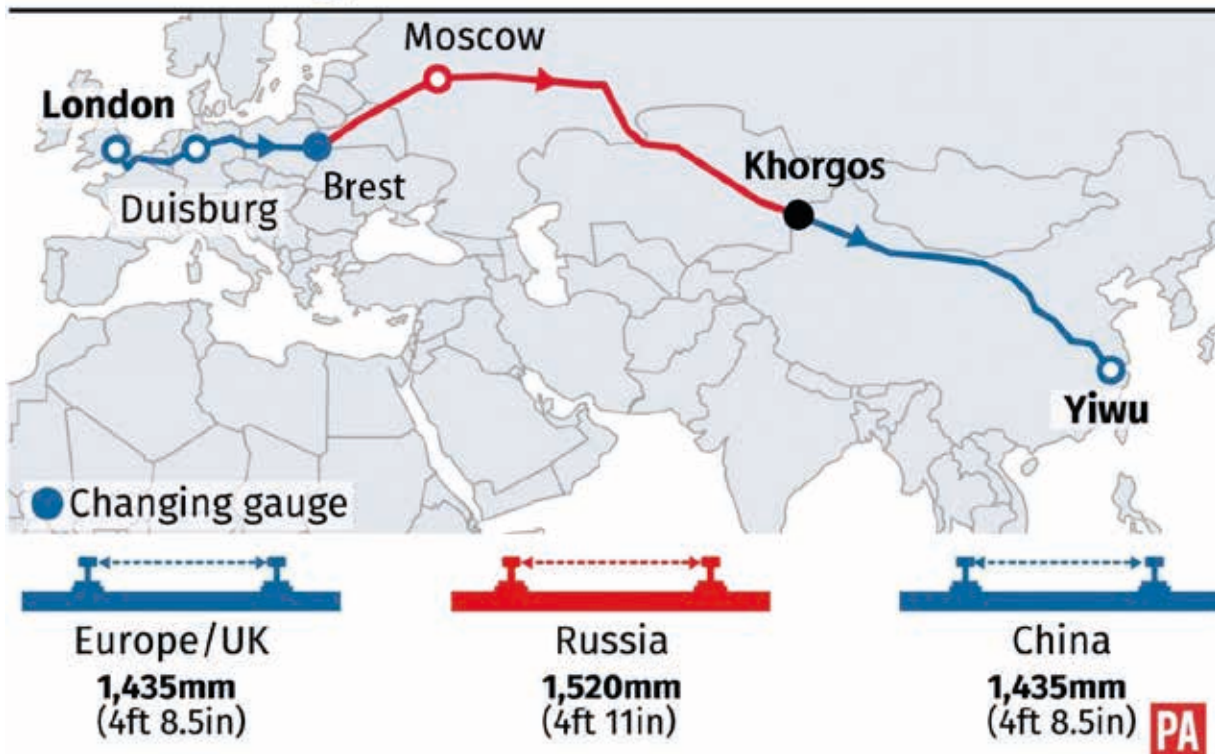
Among the first and most important infrastructure projects initiated as part of BRI, was the establishment of the New Eurasia Land Bridge Economic Corridor. The new railway line made it possible to transport freight directly over land in 17 days, half of the amount of time than it previously took over the sea route (SCMP, 2017). What followed, was the development of the railway hub on the border of China and Kazakhstan into Eurasia's largest dry-port and the creation of a new Special Economic Zone (SEZ), 'Khorgos Gateway'.



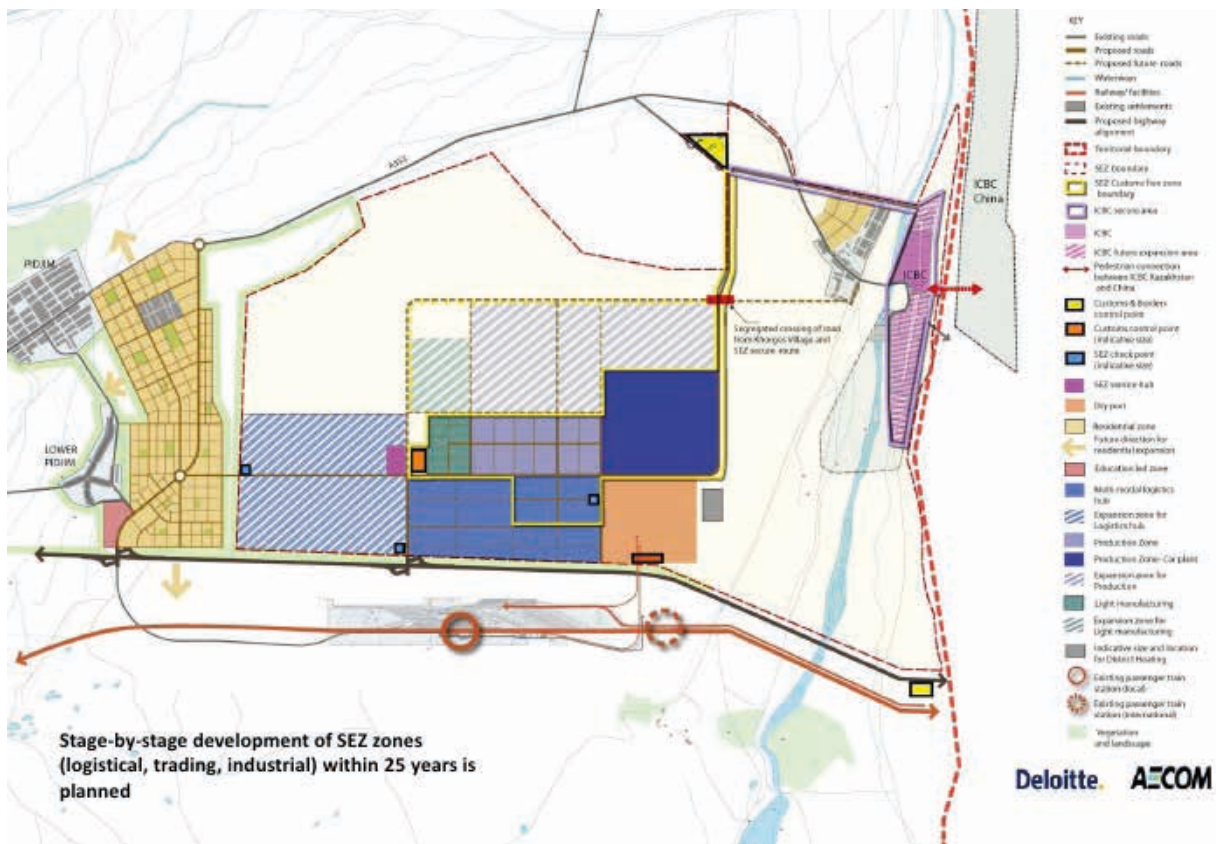
Although one development hardly can be representative for the whole BRI, the 'flagship' (Z. Huang, 2017) project Khorgos Gateway illustrates strategic combining of various BRI elements, and as such the potential transformative power of the initiative and

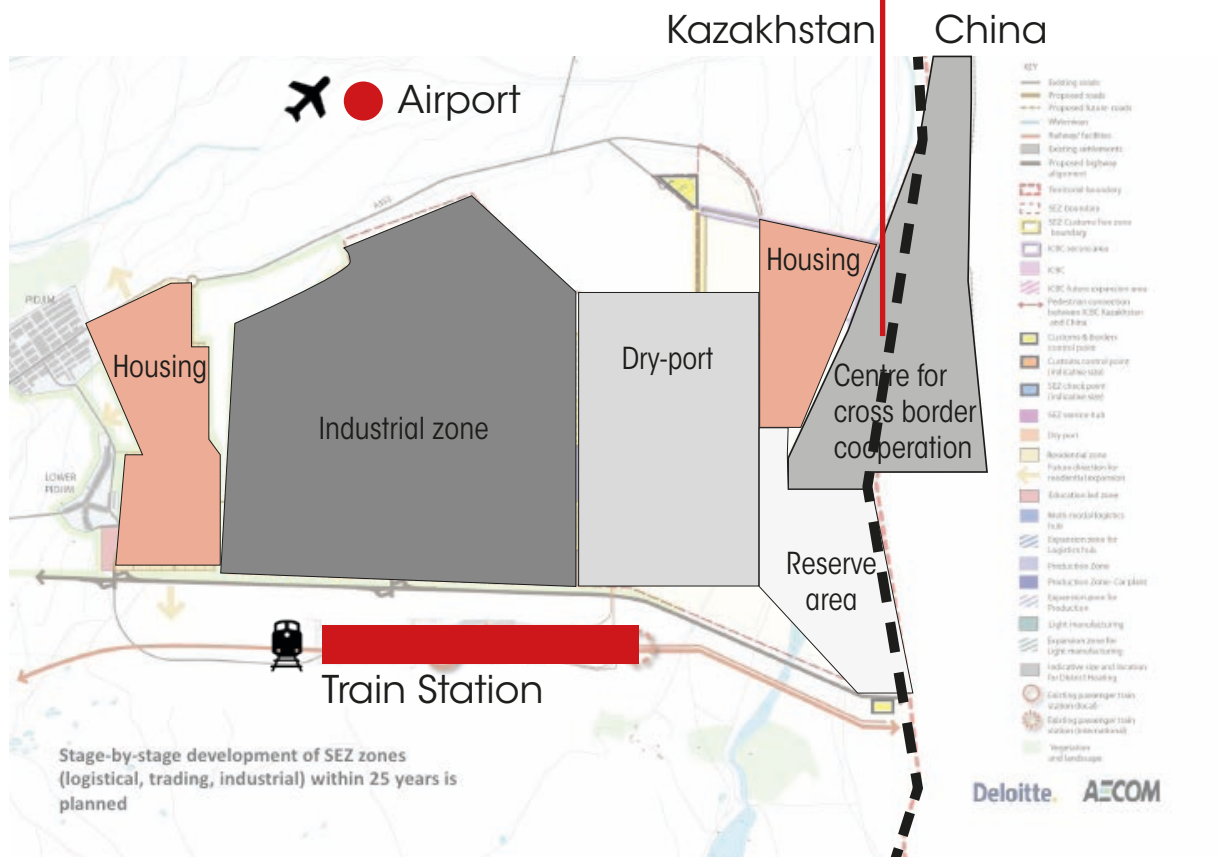
the scope of challenges the BRI might face elsewhere, serving as an valuable study-case. Khorgos Gateway reflects the 'thinking in opportunities' spirit China puts forward with BRI.

First rail freight service from UK to China



Context





Context



Khorgos Gateway – a change of perspective

When the BRI developments touched the ground at the border of China and Kazakhstan in 2010, it was an empty canvas of wide, wild steppe landscape with the Dzungarian Alatau mountain range rising up on the horizon. The first urban settlements were small towns about 40 km from the border on both Chinese and Kazakh sides, with a few villages scattered around them. The area is remote by definition, situated a couple hundred kilometers away from the Eurasian pole of Inaccessibility, the center point of the continent. It was the presidents of China and Kazakhstan that saw the potential for the ‘middle of nowhere’ to become the ‘center of everything’ and initiated the development of ‘Khorgos Gateway’ a hub consisting of both economic and infrastructural strategic projects.

Infrastructure wise, the dry port was an unmissable object for the transfer of goods across borders, as China and Kazakhstan use different railway gauges. The SEZ as an economic object, provides an environment with different trading laws, creating favorable business conditions for companies and industries. What makes the SEZ in Khorgos stand out, is the addition of world’s first cross-border ‘International Centre for Border Cooperation’ (ICBC) to its program. With this trio ‘Khorgos Gateway’ fulfils exactly one of the core BRI aims – efficient economic collaboration, and is a crucial access point towards Europe, Central Asia and the Middle-East.

The future is envisioned to be grand – Khorgos is to become the “New Dubai”. To support the growth of the hub, new urban developments were planned. They embrace the border from both sides and can potentially merge into one mega polis in the next 30 years. For now, on the Chinese side, in a former village - Huo’erguosi, skyscrapers are growing by the minute so that this village can become a 200,000 people robotics manufacturing hub one day. On the Kazakh side, plans for a 100.000 inhabitant town are progressing slower. So far, the city of Nurkent was constructed to house about a thousand people, and Nurkent 2, similar in size has been announced recently.

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Summary context

Overview BRI as thesis topic

The BRI is an infrastructural mega project aimed at strengthening geopolitical collaboration between China and Europe and establishing partnerships in Middle-Asia and the Middle-East.

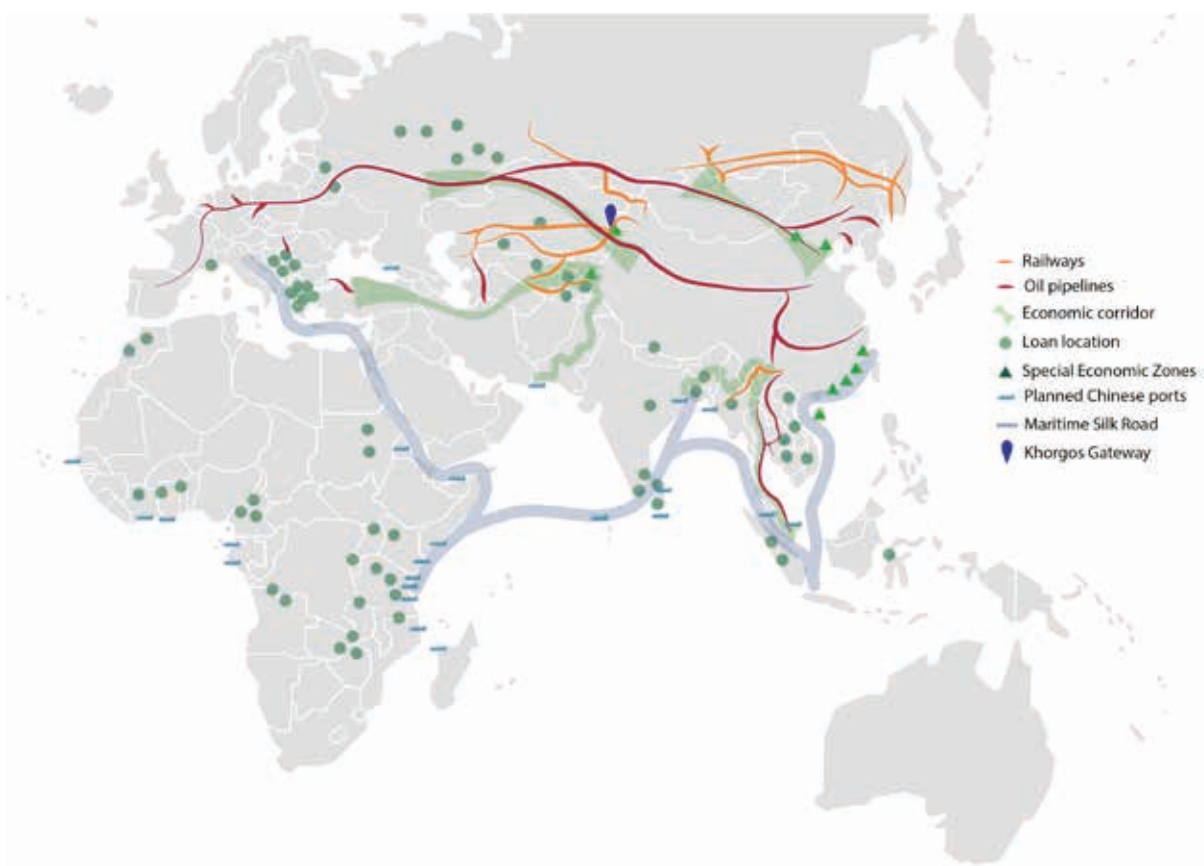
The BRI is not exactly a revival of the Ancient Silk Road, but is inspired on the historic concept and uses it to promote the abstract and untangible framework of global trading behind BRI. The new routes differ from the ancient one and have new gravity points. Generally however, the old and new concepts share the division in sea and land routes and the general areas of coverage.

The BRI pusues five goals: 'policy coordination', 'facilities and infrastructure connectivity', 'unimpeded trade', 'financial integration and people-to-people bonds'.

To reach its goals the BRI uses politico-economic, physical (spatial) and socio-cultural instruments.

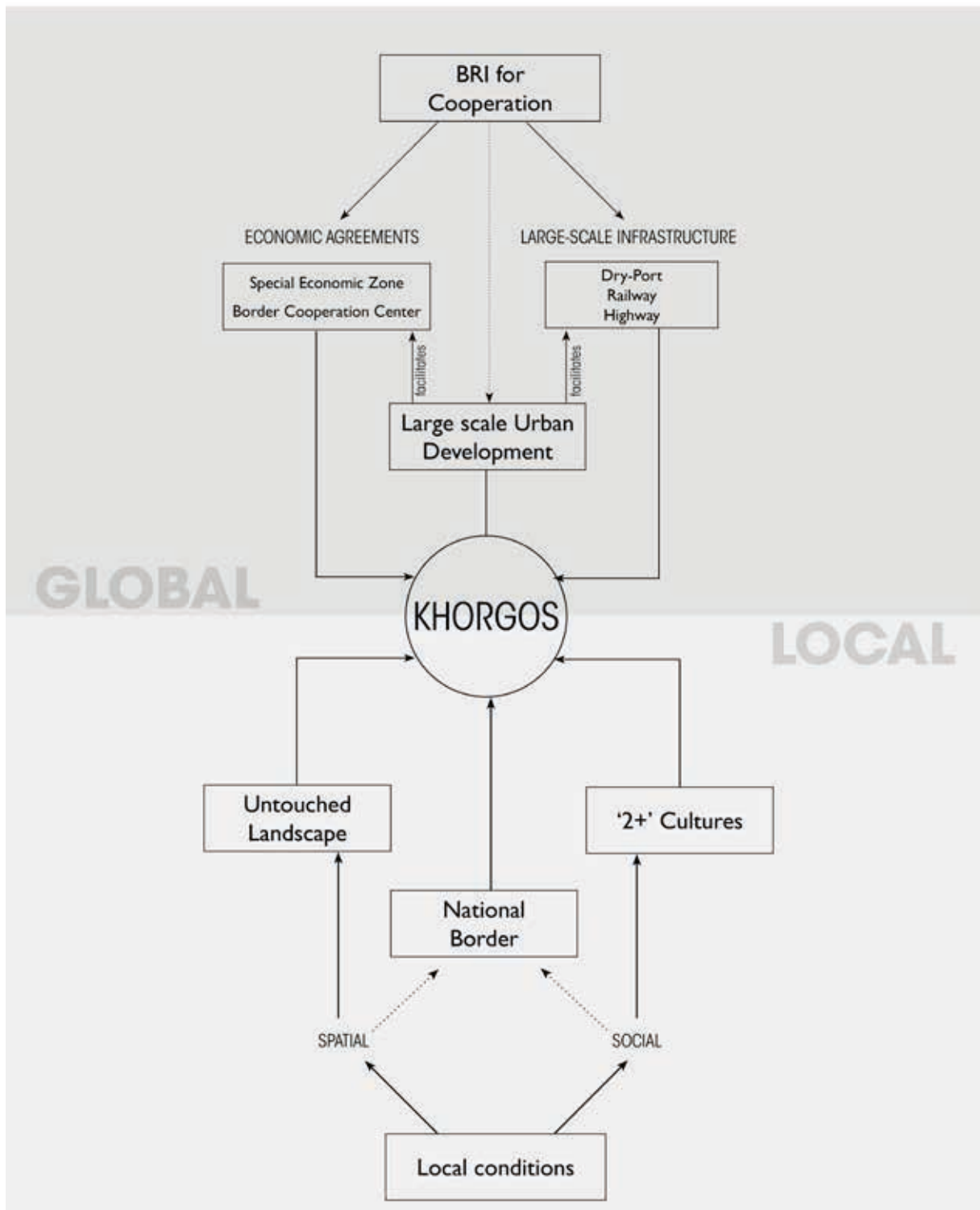
Khorgos Gateway is a logistic hub on the border of China and Kazakhstan and has great strategic importance for China as the landgate to Europe. It is one of the first developments within the BRI, first results can already be observed on ground. The transformative impact of the BRI can be observed very clearly in Khorgos, as the region was untouched by globalisation prior to the BRI-developments.

All of this makes Khorgos a valuable case to study the interaction between the global and the local, now and in the future.



Instruments of the Belt and Road Initiative. Image by author.

Summary context



Overview of global and local elements meeting each other at the study case Khorgos. Image by author.

Problem definition

Defining the scope of problem

The Belt and Road Initiative (BRI) proposed by China, implies a large scale network of economic agreements and infrastructural routes aimed at connecting China to Europe; and strengthening connectivity and trade across Eurasia. The initiative is stimulated by decision-making on national levels and is actively financed through the Chinese economy. As such the BRI is a carrier of globalisation that will pressure the so far mostly untouched region and the local context of Khorgos to adapt to this change in short timeframes.

If people to people friendship and collaboration are the changes BRI is supposed to bring into globalisation it is about to trigger, then it doesn't reach the full potential of this goal yet. Construction of large-scale infrastructure and economic agreements between nations certainly do provide a fundament for people to gather for mutual benefit, but it is the urban environment that plays a key role in people returning, settling and building upon initiatives on the long run.

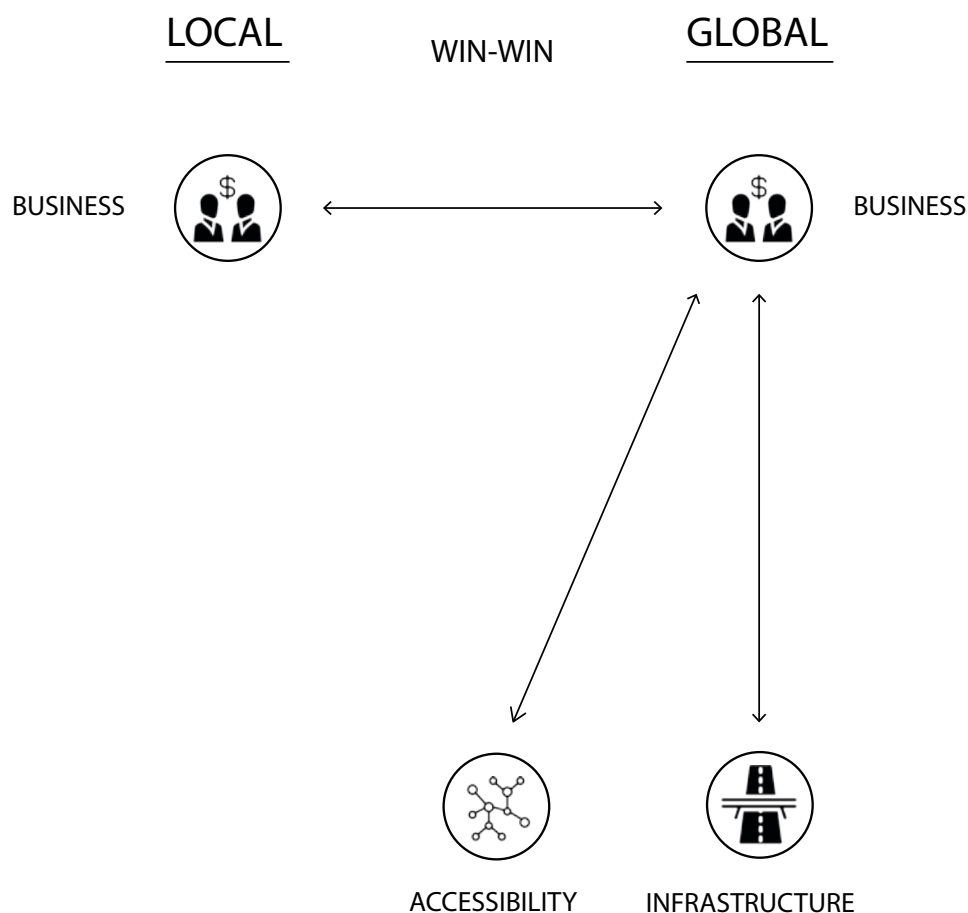
The case of Khorgos illustrates this issue as follows: current development plans propose dry-port infrastructure as well as commercial functions to facilitate efficient transportation and trading of goods from and to China. The proposed urban environments are functionally subservient to the strategic functions and as such seem to be poorly embedded within the local context. As it is common fast-paced urban developments they have a uniform, tabula rasa appearance. Considering the highly dynamic and multicultural global community that this place aims to attract the proposed plan might be challenged to suffice their diverse needs.

Problem definition

Hypothesis

The starting point of this thesis is the critique of the infrastructure centred approach observed from the BRI's first developments. Initial hypothesis assumes that new urban developments will get a subservient role to infrastructure and economy, resulting in large-scale uniform environments. The critique in the thesis concerns

the means by which the BRI claims and attempts to facilitate a win-win collaboration for all. The infrastructure oriented top-down approach the BRI handles so far in the realisation of the projects is not enough to truly connect people and set them up for durable interaction and collaboration.



The BRI is focused on facilitating accessibility through large scale infrastructure and as such to benefit the global trading in a win win way for everybody. However the question is, can the win win happen with just infrastructure? And is this assumption true on the local scale?

Research Aims

1. To define the Belt and Road Initiative as a (set of) problem(s) that can be addressed through urban planning and design. Khorgos Gateway development will serve as context to explore the problems, Khorgos Gateway will serve as a case for the second aim of the project that is supportive to the first.

2. To propose a set of planning and design interventions for Khorgos Gateway that will (1) help embed the development in the local context, (2) stimulate social interactions of the international community on the territory of ICBC across the national border and (3) make the borders of ICBC permeable to guide the (cultural) exchange between the international community within ICBC and the local community.

Research questions

How can urban planners and designers shape the Belt and Road Initiative to create interactive urban environments for a globalized future?

Preparational context questions:

- A. What is the Belt and Road exactly about, how does it work?
- B. How does it exactly relate to the Ancient Silk Route?

Supportive research questions:

- 1. Can the current plan for Khorgos answer the needs of future multi-cultural communities?
- 2. What is the future vision for the development of Khorgos Gateway?
- 3. How to embed ICBC Khorgos with the surrounding context?
How to facilitate spatial, functional and social interaction between the two?

Relevance

The Economist[Subscribe](#)

Banyan

The idea of Eurasia is once again the subject of geopolitics

The emerging order is one that Marco Polo would recognise



Michael Mikoyan

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The BRI is a widely discussed issue in media and academia and will certainly shape the coming century. The big question remains how.

Our societies are becoming less bound to a place but have a stronger need for community. The trade-off between innovation and preservation of culture suffers economic bias in decision-making.

1843



THE ROAMING EMPIRE

As Beijing's massive Belt and Road initiative spreads across the globe, it is also reshaping the city's own identity. By Michael Christopher Brown

Demolishing Kashgar's History

A vital stop on China's ancient Silk Road, the Uighur city of Kashgar may lose its old quarter to plans for "progress"



Societal Relevance

BRI's 'win-win' claim in context of globalisation and culture

Under the trend of globalization the world is becoming smaller. Companies collaborate across opposite sides of the world, missiles can reach over continents in minutes and people migrate further than ever before, creating a new kind of dynamic multicultural society.

The globalization we speak of, a rapid development of the last century aided by industrial and digital revolutions, develops faster than our societies are able to adapt to.

Habracken (2016) describes the misalignment that is happening as result:

“[...] our most advanced contemporary environments appear repetitive and uniform. [...] However, the environments we produce today shelter a society that prides itself on individual freedom of choice and self expression.”

More than ever before we need to coordinate our efforts and collaborate through all scales. However, more than ever before this is becoming an extremely difficult task to execute in this world of growing complexity.

We cannot solely rely on diplomacy as the main institution for global collaboration, when our cities are melting pots of cultures from all over the globe. Diplomacy between the heads of state doesn't solve the daily challenges of coexistence in multicultural communities, nor can it fully influence the way companies execute global visions locally.

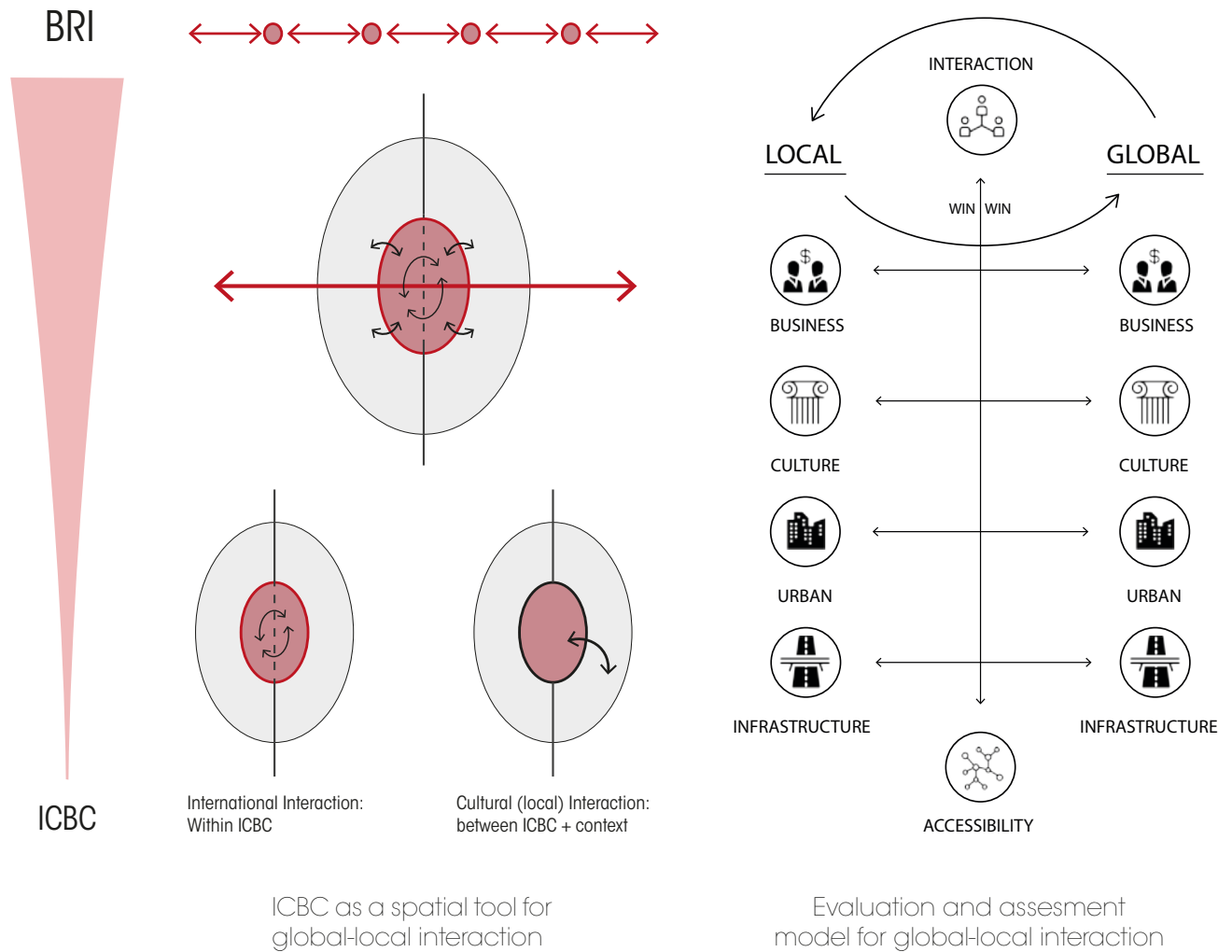
Our different cultures provide a rich set of solutions and approaches to problem solving. Culture as a set of ideas, habits and social behaviours plays a role through all scales and is especially influential on the fundamental level of human-to-human communication.

Our built environment provides the common ground for this interaction.

With the BRI China claims to start of 'a new era of globalization' and a win-win collaboration for all the parties involved. Western media and scholars in the fields of economy and diplomacy are highly sceptical of the noble intentions behind the BRI and fear that it will grow out to be a form of colonisation in best case similar to America's Marshall Plan for Europe. Taking the benefit of the doubt in this discussion, my thesis rests on the critique of the BRI's current approach towards generating win-win outcomes. As it happens the current set up of the BRI enterprise mainly consists of political and economic agreements, as well as large-scale infrastructure proposals. Globally it's easy to see how such agreements can be beneficial for cooperating nations. But a true 'win-win' and fostering people to people friendship' as the Chinese President envisioned, happens on the ground between people. As of now the BRI has no clear strategies or tools outlined that can connect through the scales and leaves the urban environments out of the concern, subservient to logistic and strategic centres.

This work explores the impact the BRI carries and the potentials it holds for the dynamic global society if the urban development is addressed more consciously. I believe that working with this fundamental issue through space will contribute to social cohesion, collaboration and understanding on all scales and as such create openings for many other economic, environmental and societal solutions.

Relevance



Exploring the link between the BRI and urbanism the thesis provides a tool to evaluate global-local interaction and a model for spatial interaction between the two. The thesis provides a first stepping stone for further research on the spatial development of the BRI.

Scientific Relevance

Addressing the gap in the literature

Since its announcement in 2013, the Belt and Road Initiative has been an emerging topic of media coverage and academic research in the fields of economy (L. K. Cheng, 2016; Djankov & Miner, 2016; Y. Huang, 2016; Yu, 2017) and international relationships (Blanchard & Flint, 2017; Y. Cheng, Song, & Huang, 2017; Ferdinand, 2016; Liu & Dunford, 2016).

Pioneering body of research on the BRI in these fields consists of comprehensive overviews explaining the initiative (Ferdinand, 2016; Shukla, 2015) and its impact on global geoeconomics; as well as in depth analyses of China's motives (Djankov & Miner, 2016; Y. Huang, 2016; Yu, 2017) behind the BRI, its objectives and instruments (Swaine, 2015). Generally there is a distinction between political, economic and infrastructural elements of the BRI, but infrastructure is being mentioned only occasionally as an instrument to reinforce connectivity for the sake of collaboration. Nevertheless, there seems to be an implicit consensus among the authors above, that the BRI will trigger more urbanisation to happen, put into words by Nalbantoglu (2017, p. 96).

It is striking that over the past two years in which the BRI-literature emerged, this topic has not yet been discussed in the field of urban planning and design. The 'mega-project of the century' (Clover, Ju, & Hornby, 2017) has been widely covered in media (Z. Huang, 2017; Manuel, 2017; Ortolani, 2018; Wong & Lau, 2017; Yan, 2015) in particular for the transformative potential of its infrastructural component for the countries and cities involved.

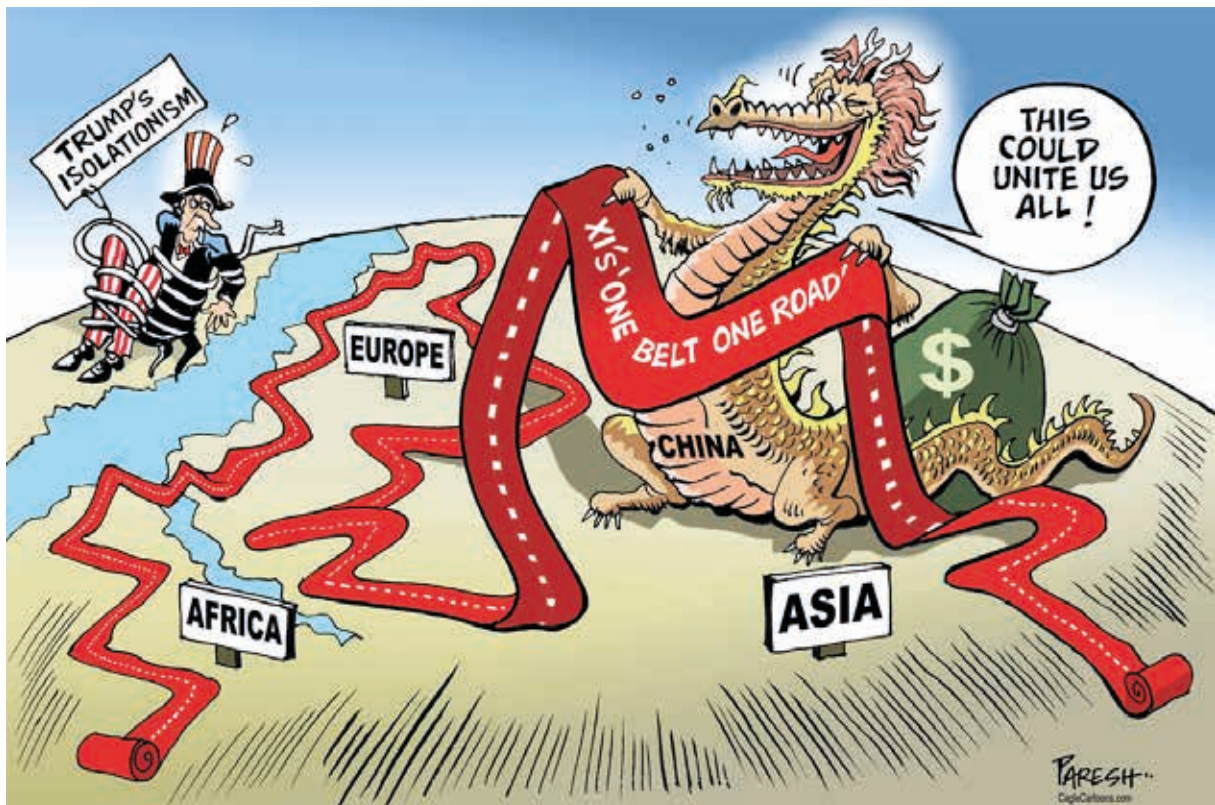
Belt and Road Initiative through the lens of urbanism

One of the aims of this thesis is to present and address the spatial challenges of the geopolitical Belt and Road Initiative. Academic interest towards this topic is rapidly increasing, however, it has not yet appeared in the academic discourse of urban planning and design. This explorative thesis is a call for a more systematic and in-depth research of the BRI as a carrier of urbanisation.

By researching the BRI as a spatial phenomenon on both local and global scales this thesis identifies five goals through which urban planning and design applications can have the most impact for a socio-spatially sustainable development of the BRI. This is the first step in developing a multiscale system to guide the spatial development of the BRI in the future.

Touching upon the themes of borders and culture (as local spatial context and social interactions) this thesis develops an experimental BRI feature, the International Border Collaboration Centre in Khorgos into a new type of urban environment that makes it possible to embed a globalised development into the local context and foster interaction and synergy between the global and the local.

Relevance



source: <https://www.cagle.com/paresh-nath/2017/05/china-silk-road-strategy#.WzF5ltzZPZ>



source: <https://www.cagle.com/paresh-nath/2017/05/china-silk-road-strategy#.WzF5ltzZPZ>

Ethical issues

Win-win or colonisation?

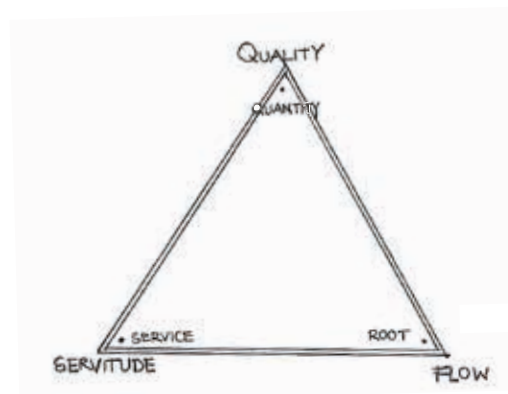
China faces a lot of scepticism towards the sincerity of the win-win spirit behind the Belt and Road Initiative. Western thinkers tend to see the BRI as a tool towards world domination and define it as another form of modern colonisation.

The evidence for this is the economic dependence of developing partner countries through the loans and services China provides for realisation of BRI projects. Chinese industries need such an outlet to stay competitive in business. The analysis of Khorgos Gateway in this thesis shows that the BRI-projects can serve as a catalyst for development or revival of a region, but also that in order to fully exploit this potential, the proposed developments need to be carefully tailored to the local context.

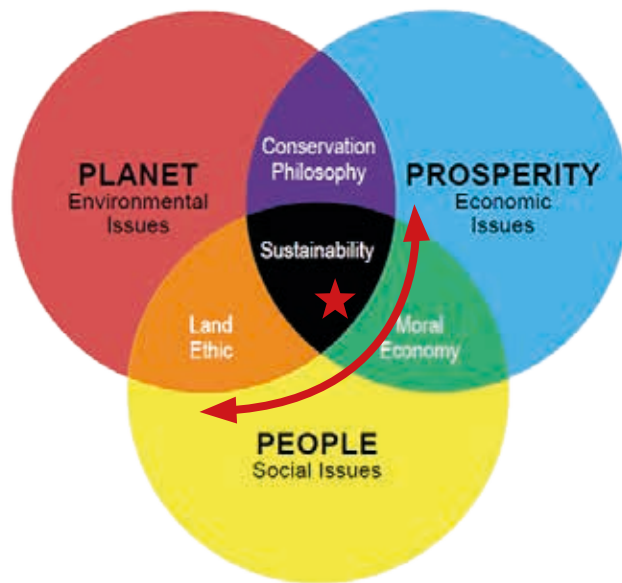
A question that becomes urgent at this point is, who gets a say in how the developments are shaped? To be democratic, everyone's voice needs to be heard, but in order to make rapid progress, someone has to make the decisions and bear the responsibility it brings along.

The approach taken towards design in this thesis was an attempt to find this balance and resulted in the following compromise: researching as many possible perspectives in problem definition phase, in order to make well-informed decisions in the design phase. In practice, this also implies an evaluation of the design project through various global and local perspectives.

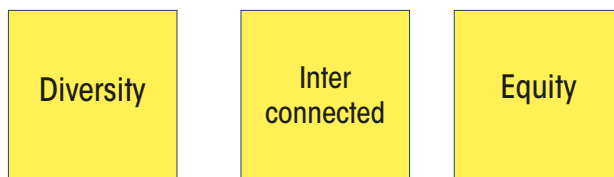
Finally, the design process unveiled a deeper principle underlying to interaction and exchange. The number of services (BRI's interventions) rooted in the context on itself alone, won't do the job. Quality, servitude and flow are needed to engage the parties involved in the interaction. This point is further illustrated in the evaluation chapter.



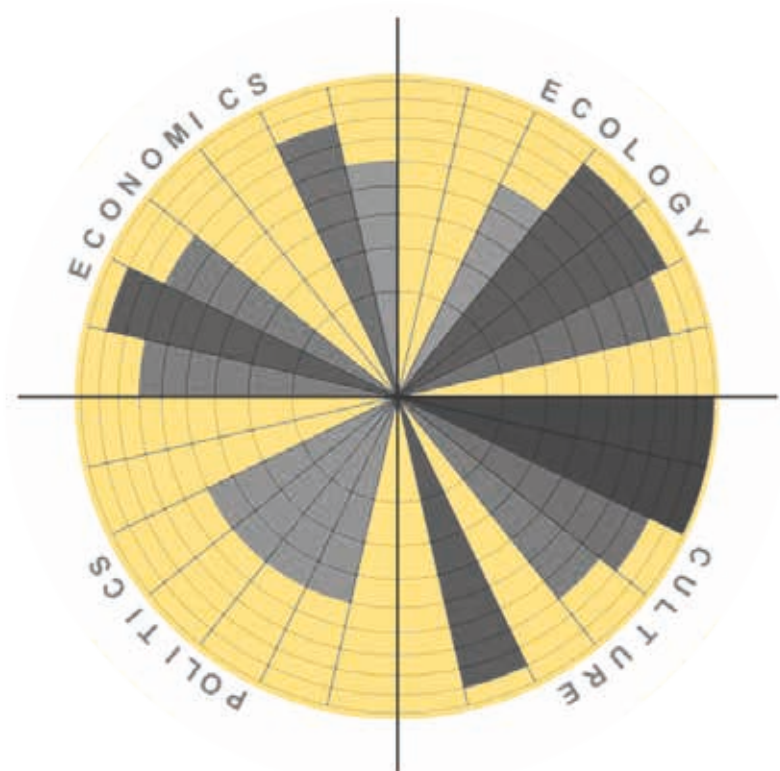
Relevance



Sustainable development pillars and positioning thesis.
Source: <https://wmsbf.org/>



Thesis relevant dimensions of social sustainability as defined by A. Sen.
Source: (Hodgson, n.d)

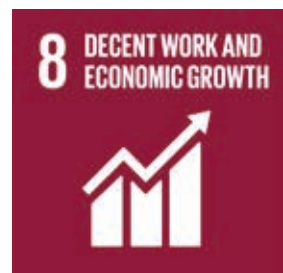


Sustainability circles towards socially sustainable outcomes. Bars cover the social aspects of the four domains and indicate which aspects are touched upon within the thesis.
Source: <http://www.circlesofsustainability.org> (edited by author)

Covered by BRI,
reinforced by design:



Covered by design
proposal for ICBC:



Source: www.un.org/sustainabledevelopment

Positioning within sustainability debate

Sustainable development classically is explained through the model of the three pillars of sustainability, which are: planet - environmental issues, prosperity or profit - concerning the economic aspects and people - covering the social issues. Sustainability implies developments that balance the needs of current and future generations.

Awareness of our global dependency on fossil fuels and the increasing greenhouse effect, at the change of the centuries popularised the environmental aspects of sustainability. In recent years the prosperity and people aspects have been defined and developed further as well. Nevertheless social sustainability, the people pillar, remains one of the hardest aspects of sustainability to define and measure.

In 2015 the United Nations brought forward the '17 Global Goals for Sustainable Development'. These interdependent goals cover social and economic aspects of sustainability and result in 169 targets for the year 2030.

Making its global move with the Belt and Road Initiative, China advocates for people-to-people friendship, better future and innovative collaboration' (Ministry of Foreign Affairs PRC, 2013). Although the BRI mission so far is far less clear, there are clear parallels with the detailed sustainability goals of the UN. Factually, judging from the developments so far, the main focus of the BRI is directed towards the prosperity pillar of sustainability. BRI also makes a big emphasis on the people-to-people friendship, but this does not yet translate into implementations that cover social issues yet, and is mostly manifested through international cultural festivals, rather than human and labour rights or 'community development and cultural competence' (Sowder, 2016).

Translating the BRI mission into the 17 goals proposed by the UN, it touches upon the goals 'partnership for the goals' and 'industry, innovation and infrastructure'. Given the personal fascination for the social and cultural aspects of urbanism, the design proposal covers three of the five dimensions of social sustainability as defined by Amartya Sen (Hodgson, n.d.). Additionally, the concept of ICBC as a meeting place for local and global communities contributes to UN goals 'quality education', 'sustainable cities and communities' and 'decent work and economic growth'. Wheel of sustainability is used to show how the thesis positions itself within the concept of 'sustainability circles' aimed to produce projects with 'socially sustainable outcomes' (Circles of Sustainability, n.d.). The model represents various social aspects of sustainability domains such as: Habitat and Settlements (ecology), Creativity, Identity, Learning (culture), Representation and Negotiation (politics), Exchange and Transfer (economy).

Methodology

1

Understand the Belt and Road Initiative

2

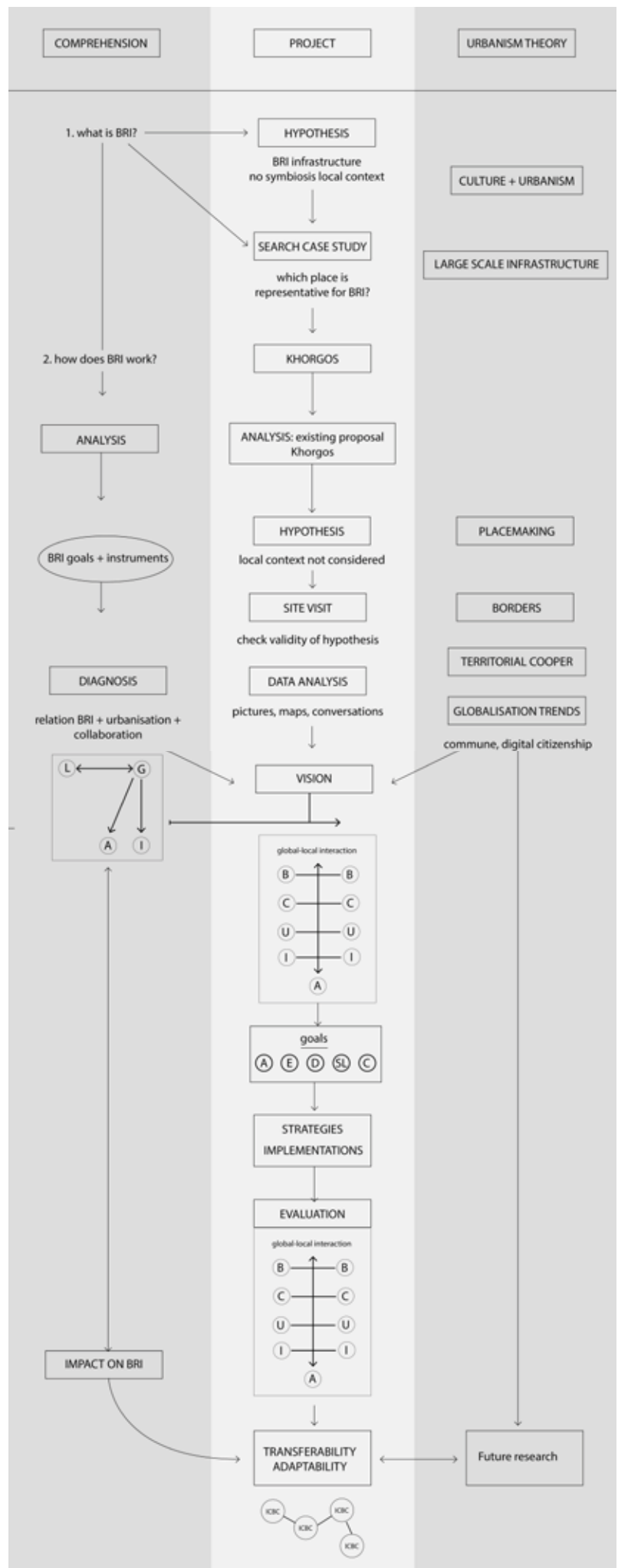
Study-case: Khorgos Gateway

3

Design: Interaction global and local in Khorgos

4

Evaluation and transferability



Methodology

Phase 1:

Understanding BRI, defining the research scope

After getting a general understanding of the BRI, a study case was needed to examine how the initiative touches the ground and how its effects on the local scale look like. The BRI is still a very young enterprise with most of its plans remaining on paper. BRI's first flagship project was the construction of the New Eurasian Landbridge, a railway connection from London to Yiwu. The search for a case-study narrowed down to locations along this route, as after five years since the realisation first effects of the intervention would be visible. Khorgos Gateway unveiled itself to be yet another flagship project of the BRI, priceless as a study as it intervened with previously untouched landscape and settlements.

Phase 2:

Experiencing Khorgos and the broader region

Exploring urbanism research and design perspectives

During the field trip, I examined the BRI through the lens of a local perspective. Local problems illustrated different facets of the bigger problem. Theory research and analysis were happening almost simultaneously, but the site visit and people's stories gave an overview and focus on what to search for in theory. Just like I have explored the local context through the many eyes of the residents and users, I explored the global and theoretical context through the eyes of experts (*see appendix for names*). Combining all these perspectives together helped me to connect the problems across scales. Therefore from this point on the analysis findings as well as design implementations were organised across the scales XL, L, M, S.

Phase 3: Integrating global and local a vision and design for Khorgos

The clear problem statement translated into design aim to facilitate collaboration. The centre point of design interventions would be the ICBC as it already was meant to be a neutral meeting point. This defined the design philosophy build upon the existing as much as possible. Bringing together the local problems and global perspectives, generated five development goals tailored to the ICBC and the surrounding context on the Kazakhstan side.

Phase 4: Design and evaluation tool

Reexamining the 5 goals, as well as the diagnosis of the problem with the current BRI approach, I defined 4 domains of relations between the global and the local context, a goal and a means to achieve it. This made it explicit to myself that the essence of my design goals, strategies and implementations was the facilitation of interaction between the global and the local.

Research through design unveiled the underlying conditions needed for an interaction to happen, opening perspectives towards the global application of the ICBC, now as a spatial tool for interaction.

Methodology



Talking to the locals in person was a crucial aspect of my methodology



Observing and documenting the local use of space.

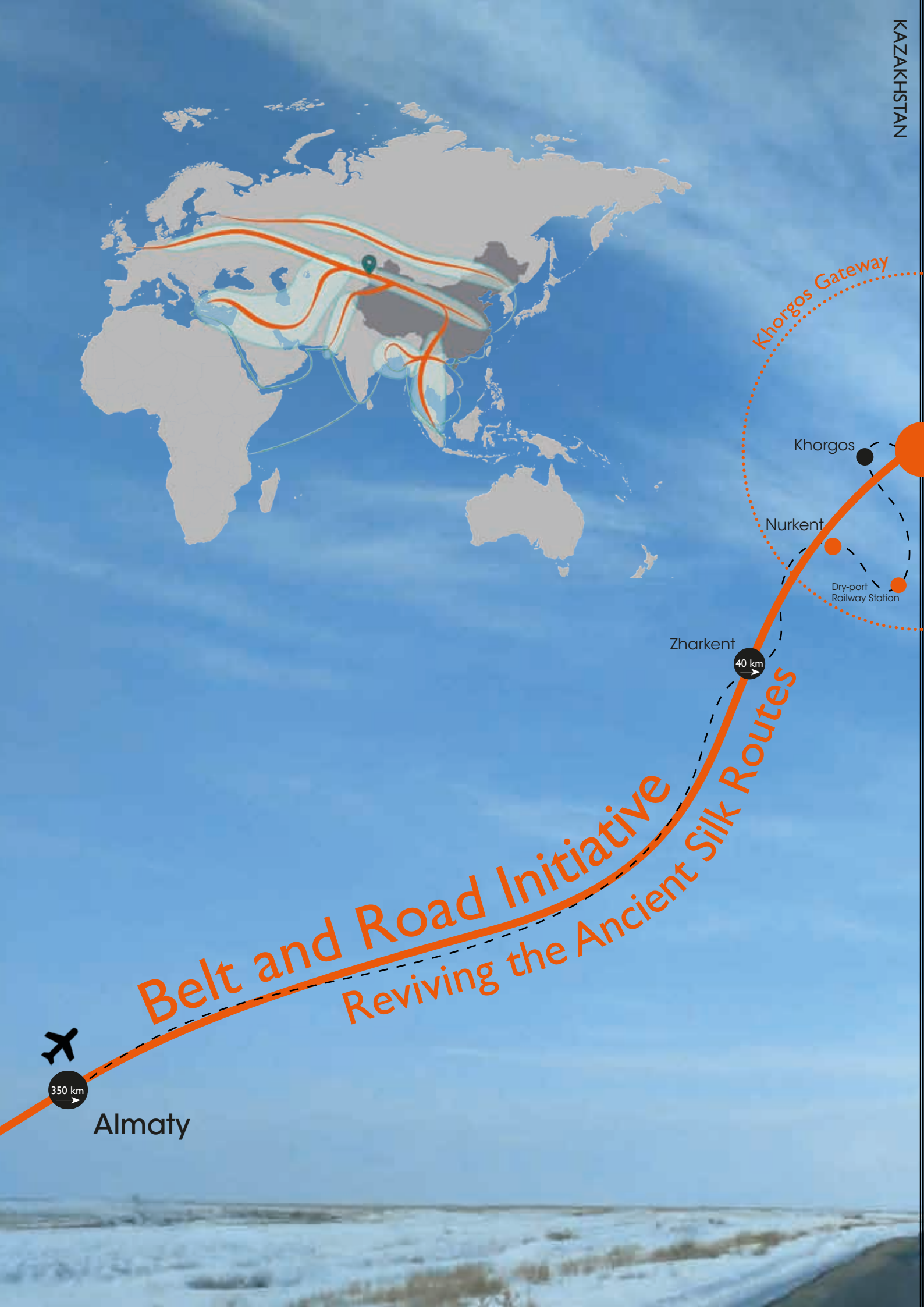
Research and design relation

A great proportion of the research process was dedicated to understanding what exactly the BRI initiative entails. As the topic is emerging just recently and hasn't been covered yet in academic literature outside of diplomacy and economics, the quest to frame the initiative in clear terms and with it to define the relevant problem statement was long and iterative. I studied the BRI from two perspectives; global (top-down) through media coverage, and local (bottom-up) through the site visit to the case-study Khorgos and surrounding region. Both groups of findings combined led me to a set of themes that seemed relevant to address through design. The design adaptation of the ICBC itself triggered rethinking its function and led to the development of a new concept, capable of mitigating the BRI course of development towards a more culturally inclusive one. As such the design opened a new research direction that could be developed further.

Reflection on the method

My approach can be described as quite intuitive and people-oriented, journalistic in some sense as I collected a lot of information through conversations and various media coverage. This method can easily fall victim to subjectivity, using it forced me to continuously re-question my findings and assumptions until I would be able to uncover the intrinsic logic of things. As such, my research process was a lot about finding the right questions to ask through analysis and design. Therefore the design phase started relatively late, only after the findings on the global scale synthesised with the findings and problems on the local scale and translated into development goals for the site. My process was a continuous switching between the global scale of the BRI and the local conditions of the case Khorgos Gateway. This was a disorienting, explorative process of searching for the common ground between the extremes in order to find the point of application through which both could be mediated by design.

Due to its explorative nature, it might be lacking a solid support through academic data. But also due to its explorative nature, it connects many dots, reaching out towards various theories and approaches, and as such becoming an inspirational roadmap for more fundamental future research, that I would love to continue doing after graduation.



Belt and Road Initiative

Reviving the Ancient Silk Routes



350 km

Almaty

40 km

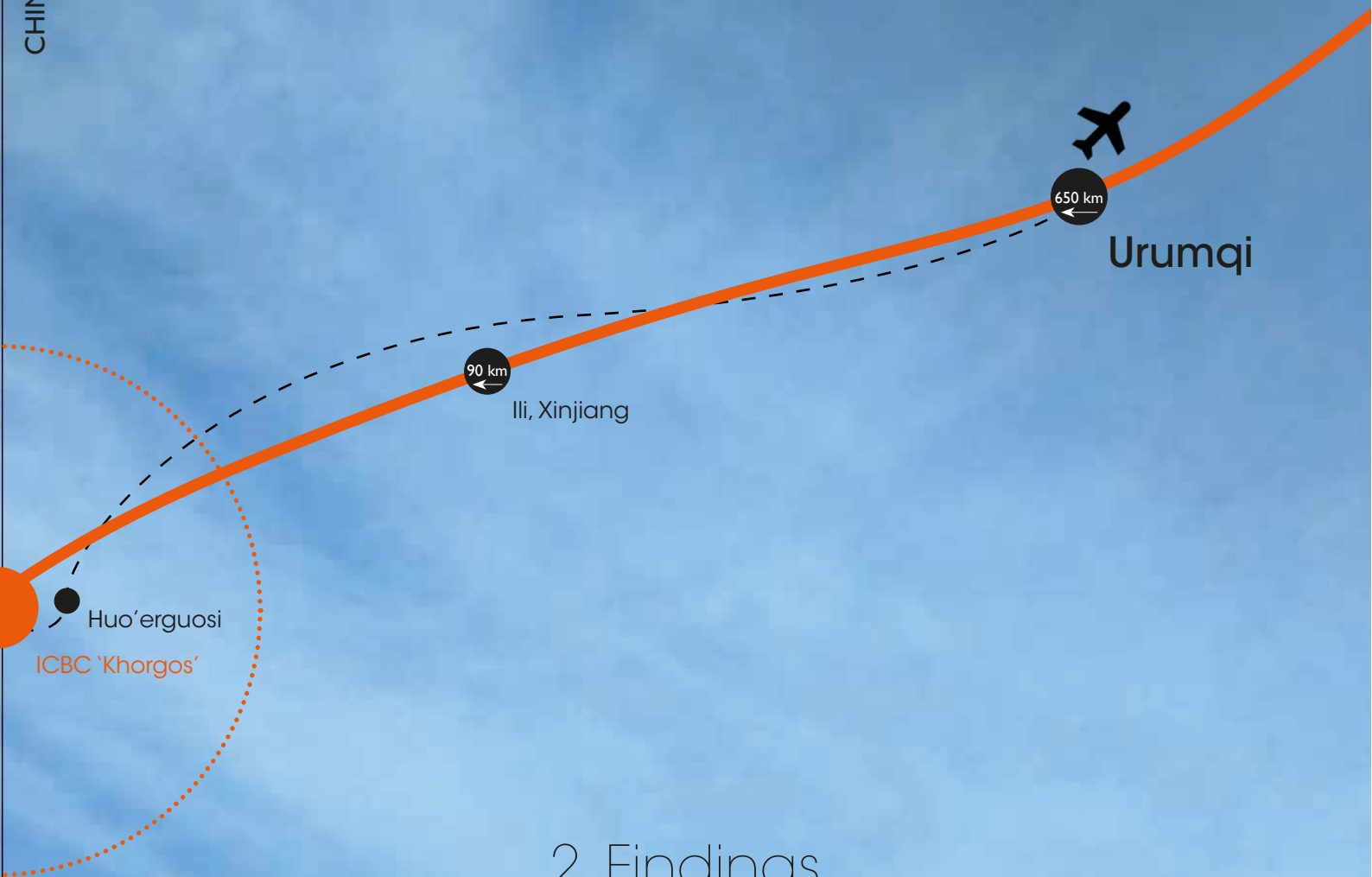
Zharkent

Khorgos

Nurkent

Dry-port
Railway Station

Khorgos Gateway



2. Findings

Fieldtrip Review | Analysis | Theory

Researching theory and analysing the site mostly happened as parallel processes. However, the theoretical endeavours only started to make sense after a first-hand experience on site. Analysis of my field findings helped to attach the various theories to the actual problems on site and in such way organise them, assigning a different value of importance to each. Process-wise, it was also only after my field visit that I was able to complete the theoretical position paper that helped me to define the problem I would address further in my thesis.

Therefore the findings section starts with a field trip review, sketching the context situation, followed by analysis and theory findings.



Reflection after field trip

The local experience of Khorgos Gateway

continuation from page 33

The local experience

Nevertheless, a simple change of perspective takes time to live up to. Khorgos Gateway, operating full-time now, remains a challenging destination for an average traveler. First, the predominant language for international communication across borders is Russian, with English limited to the navigation signs in the airports and along the highways. Furthermore, it takes 6 hours by bus or taxi to Khorgos from Almaty and double the amount of time from Urumqi, currently the closest cities in the area with international airports (although there are plans for a new airport near the border). Twice a week it is possible to reach Khorgos from the direction of Almaty, Astana and Urumqi by hopping off at the Alashankou railway station near the dry-port.

Kilometers of blank space of untouched landscape between the new developments of the Khorgos Gateway indicate the future potential of the hub. At the same time it feels like the human scale is left out of the equation during development. Considering that all the inhabitants of Nurkent (20 km from the border), work in the dry-port, there is no proper railway connection. It seems so strange that these people are forced to depend on cars, as the new-town they lived in was too far away from their work. The long distance aside, there are no walking or biking paths along the highway to offer a convenient alternative and protection from the burning sun in the summer or the icy winds in the winter.

As for brand-new Nurkent itself, it nevertheless struggles to inspire. Although the settlement is inhabited to its full capacity, it gives an empty impression. It may be because of the absence of a decent public space and the cozy tree-framed alleys, but there are barely any people on the streets of Nurkent. There is no public life. The inhabitants confirmed, work opportunities aside, there is nothing to do in Nurkent. Strangers to each other, people from different towns and villages across Kazakhstan are brought together in Nurkent by work, but don't have a place to socialize. If they get to live in housing typologies with shared space, neighbors get to know each other. In other cases, such as the stand-alone houses this is much less likely to happen. There are no parks, just an occasional grass field. Shockingly (for a planned city), the shops are stuck up in office rooms of a "community center" because of the lack of a proper shopping facility. The last resort for a sense of public life is the public bathhouse, gyms and the kindergarten. The local cafeteria (with the first and only English sign in town saying 'welcome') remains empty when it is not reserved for banquets of visiting committees and officials. Although the housing conditions are decent, and the kids play outside joyfully, young adults are not happy living in Nurkent. To hang out with friends or have some quality time with the whole family, Zharkent, a 20-minute drive away is the place to be.

It's hard for the new Nurkent, to compete with the established Zharkent or even the small villages around it, as it lacks both the diversity of a big city as well as the freedom and community

Reflection after field trip

feeling of the villages. For example, it puzzles the inhabitants of the stand-alone family houses of Nurkent, why they are not allowed to construct their own banya (small bathhouse) on the adjacent piece of land belonging to their property. The apartment buildings are seen more like an unavoidable necessity as most people strive to have a house with outdoor space to grow fruits and vegetables, hold animals, have a private garage or a play garden for children. While in Nurkent there is no such option, the 130-year-old Zharkent is currently expanding by making land available for private developments and welcoming new inhabitants that leave their villages behind.

Given the fact that the future for ICBC are meant for more than just trading, I tried to understand the local attitude towards ICBC at the border as a potential solution for the missing entertainment. I found out that among the locals the trading center is seen exactly for what it currently is, a wholesale market for cheap Chinese goods, without much hope for improvement in the future. It would need to be a big luxurious shopping and entertainment center, like the ones built in the 'million cities' Almaty and Urumqi, for it to attract masses of people on daily basis. For now, a visit to ICBC is a day-trip activity, complicated by long lines and security checks at the customs. On the territory of ICBC trade seems quite one sided for now, with the Chinese selling and the Kazakh buying. The cheap price of goods is worth the hassle for individual customers even though traders are held back by the tight export limits of 50 kg and 1500 euro per person per day. The

local markets of Zharkent and the few shops in Nurkent are filled with goods from wholesales in Almaty, Astana or even Urumqi.

Tension between (global) expectations and (local) reality

Khorgos Gateway development gives big hopes for the future. Making the infrastructure of Khorgos Gateway functional for the first train to run from Yiwu to London, the first CEO of 'Khorgos Gateway', Karl Gheysen convinced the global community that the vision for 'the New Dubai in the steppe' can become a reality (Shepard, 2017). However, this was not enough to win over the locals that are hopeful, but also skeptical or in their own words 'realist', about the development. "Even if it would become a big city in the future, what does this give me now? I can't live for 20 years feeding of tomorrows", sighs one of the locals'. And this is understandable after seeing the daily life in Nurkent, and some of the challenges within the region.

For example, the high-tech dry port struggles to reach its full potential. For political reasons 80% of the freight flow, is still being handled by Dostyk station about 400km to the north across the border (Shepard, 2017).

The vision of a future mega polis is further challenged by the demographics of the region. Kazakhstan with a population of 18 million, just recently performed a population shift, moving its political center point to the brand-new city of Astana in the north. Nevertheless Almaty, just 350 km away from Khorgos, remains the wealthiest and largest

city with 1.5 million inhabitants. The Xinjiang province across the border with most of its inhabitants living in the 2.5 million populated capital Urumqi, continues to lose inhabitants despite the recent rebranding into BRI's cornerstone region. The Chinese government created a lot of favorable conditions in Xinjiang to attract companies and investors, but most prefer to work their way around and stay in the bustling East of the country. "Since the announcement of the BRI, many companies registered in Xinjiang get the economic benefits, but they don't want to move their business here because it does not have a very big population and the government controls for safety reasons causes a lot of inconvenience" one of the traders in Urumqi said. Since the terrorist attacks in 2009, Xinjiang prioritizes safety and stability over economic growth.

Urumqi shows another challenge that Khorgos might need to battle; empty wholesale markets, that welcomed thousands of people on daily basis just 5 years ago. Digitalization of trading through social platforms like WeChat (Chinese WhatsApp with a digital wallet), made frequent visits to physical malls unnecessary. With further progression of this trend, the brand-new ICBC might suffer the same fate.

This raises the question: can Khorgos Gateway overcome these challenges, and attract enough people to match the density and prosperity of its role-model Dubai? And should it?





Source: Urumqi, travel picture by author.
For more travel photographs see the appendix.

Analysis

XL	
Silk Road Heritage	page 64
Backgrounds Almaty Urumqi	page 68
Population and migration	page 72
L	
Regional accessibility Khorgos	page 77
M	
Regional identity	page 78
New developments of Khorgos Gateway	page 82
Newtown Nurkent	page 84
S	
Introduction ICBC	page 88
ICBC border analysis	page 92
Summary analysis	page 100

Analysis

Introduction analysis

Two main questions shaped my field trip and therefore the collection of finding presented on the following pages.

Who are the people and what do they need?

What is the place about and how does one get there?

After the field trip the findings boiled down into topics accessibility, culture, functions and roles of the cities and organised across 3 scales: transnational (L), regional (M), and local (S).

Transnational (L) scale shows the bigger forces driving people towards or away from Khorgos. Through the regional (M) scale I explore the dynamics within and the qualities of the region surrounding Khorgos.

Within the Khorgos Gateway development, I zoom in on the ICBC (S) to explore the transformative potential of this intervention for the region.

The analysis on the following pages will present my findings starting from large scale, to medium scale and finally the small scale. The scheme at the bottom of the left page will help navigate across the scales.

At the end of this chapter, the findings will be summarised in a short overview.

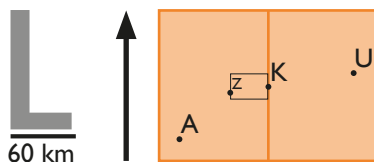
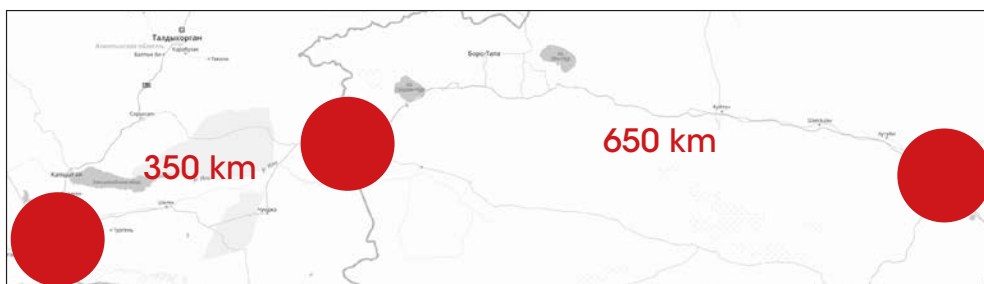
National scale
Kazakhstan - Khorgos - China



XL

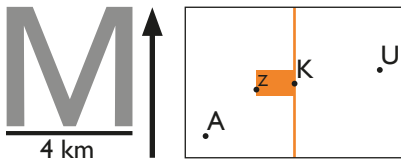
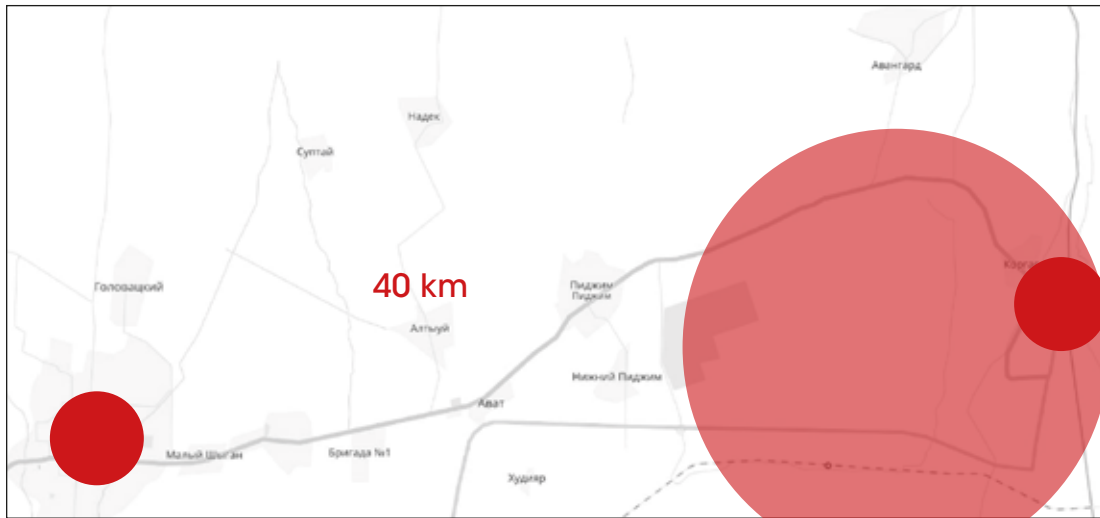
Khorgos Gateway a meeting point between East and West on the border of China and Kazakhstan.

Transregional scale
Almaty - Khorgos - Urumqi



This scale frames Khorgos with the two closest metropolises surrounding it. As the region on both sides of the border is thinly populated, people are used to travelling big distances to the convenience of big cities. Therefore it is hard to compete for new inhabitants for Khorgos, having two biggest megapolises in the region around the corner.

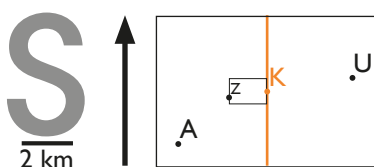
Regional scale Zharkent - Khorgos



This scale frames Khorgos together with the regional centre Zharkent. A small but prosperous town of 40.000 people that attracts people from the surrounding rural areas and is the place to be in the border region.

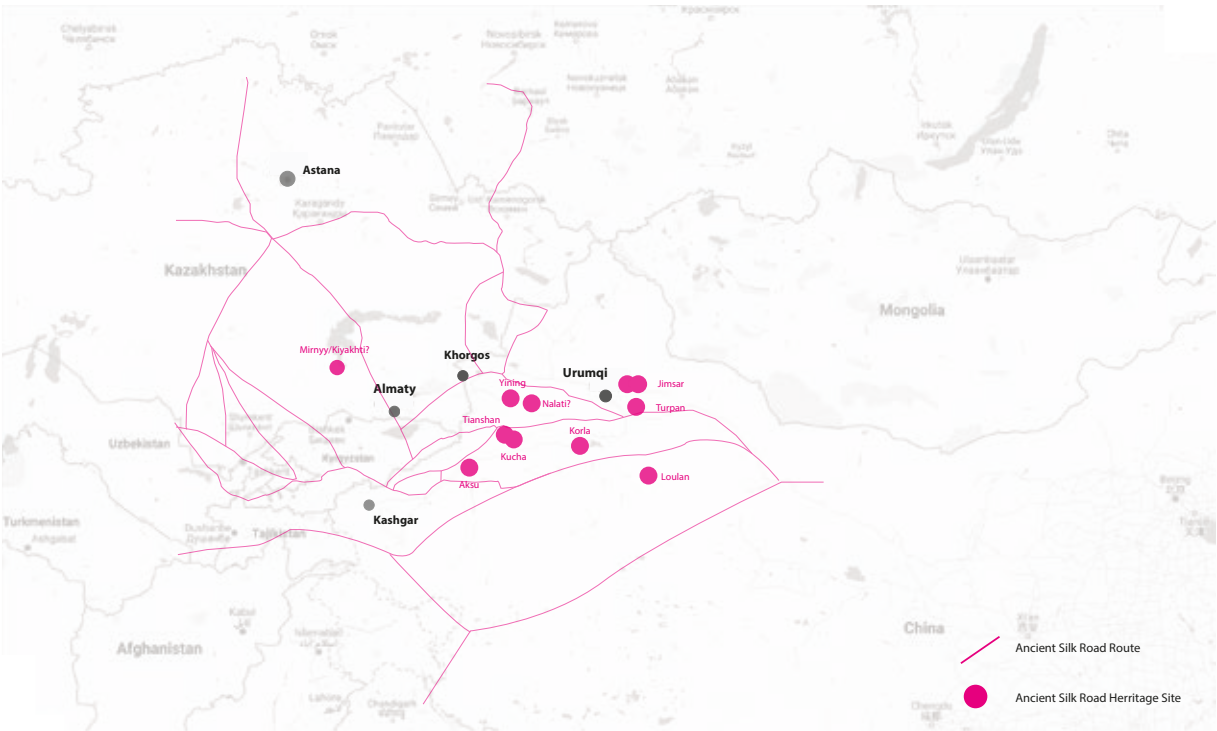
Local scale ICBC Khorgos

ICBC is an independent element within the Khorgos Gateway positioned at the border with the potential of regional and national impact on both sides.
















































Analysis

Regional Silk Road Heritage



Silk Route heritage gems in China

1. Turpan			
1. Urumqi			
2. Jimsar			
3. Turpan			
3. Jiaohe			
5. Kucha			
7. Tianshan			
8. Aksu			
8. Kashgar			
9. Hotin			
10. Nalati			
11. Korla			
12. Loulan			
13. Yining			
14. Charchan			

Silk Route heritage gems in Kazakhstan

XL



Tianshan Mountain range near Khorgos



Silk Road Heritage in Xinjiang and in East Kazakhstan.

Recently the Tianshan corridor was added to the Unesco Silk Route Heritage list. It is not the most accessible tourism for real travel fanatics. One of the oldest cradles of the Ancient Silk Route. Kashgar in Xinjiang province being the oldest most preserved city.



XL

Analysis

Silk Route heritage gems in China

1. Turpan

A Silk route city worth visit due to its many ruins, natural scenery and the largest ancient Islamic tower. Important scenic spots include Jiaohe & Gaochang ancient cities, Astana-Karakhoja Ancient Tombs, Bizalkik Thousand Buddha Caves, Aydingkol Lake and the Emin Minaret.



The ancient city of Jiaohe, 10 km west from Turpan.



Emin Minaret: world's largest ancient Islamic tower.

1. Urumqi

The energetic capital of Xinjiang. It was, and still is, a major hub in the Silk Route, the connection between the far east and the West. After emerging oneself in the Uygur culture within Urumqi, a trip to the nearby Turpan and Jimsar (old Silk Route gems) is unmissable.



Urumqi: a major hub between the East and the West, both in history and in the present.



The Grand Bazaar in Urumqi

2. Beiting, Jimsar County

An old, but unmissable Silk Route gem near Urumqi is Beiting. It used to be a military epicenter where protection was offered to traveling merchants. These days impressive ruins and relics remain to be standing.



Ruins of the Grand West Temple.



Well preserved statues.

5. Kucha

An important hub in the Silk Route, (semi-)independent in ancient times. Now home to a variety of scenic spots: e.a. the Baicheng caves, the Kizil caves and Subashi ancient city.



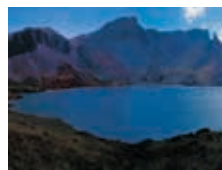
Architectural relic in Kucha.



Kizil Thousand-Buddha Caves.

7. Tianshan

The Tianshan, "heavenly mountains", are known for the Chang-an Tianshan corridor, a 5000 km Silk route through from the far East to the West. The scenery is breathtaking, hence the name.



Heavenly Lake in the Tianshan Mountains.



Tianshan Mountains from above.

8. Aksu

An old city right at the junction of two important silk routes, a historically rich place and definitely a must-visit.



8. Kashgar

A beautiful oasis city that used to be a trading post and a strategically important silk road hub. Kashgar does not only have great ruins, modern Kashgar is a culturally rich, typical Uygur city.



A mosque on a modern Kashgar square.



Stone city in Kashgar.

9. Hotan

A strongly agriculturally developed city, dependend on the Karakash River and White Jade river. Historically an important Silk Route gem.



Tuanjie square in modern Hotan.



Hotan's Melikawat ruins.

11. Korla

When Francis Younghusband, a british army officer, passed through Korla in 1887, he described the town as prosperous and one of the best cultivated places in the area.



Korla is known for its fragrant pears.



Festival performance on a Korlan square.

12. Loulan

Loulan was on the main route from Dunhuang to Korla, where it joined the so-called "northern route," and was also connected by a route southwest to the kingdom's seat of government in the town of Wuni in the Charkhlik/Ruoqiang oasis, and from thence to Khotan and Yarkand.



The Loulan ruins by sunset.



Loulan style ancient costumes.

13. Yining

An important hub for the Silk Road: it is the endpoint of the Muzart Pass, starting from Aksu, ending in Yining.



A mosk in contemporary Yining.



County life in Yining.

14. Charchan

Also called Cherchen or Qiemo, it is another important hub along the Silk Route.



The main entrance of a Charchan bazaar.



Remains of Charchan's history.



Urumqi, Xinjiang, China

Urumqi is located in the Xinjiang Uygur Autonomous Region, the biggest province in China. Xinjiang is the west gate of China, it borders on or neighbors to Pakistan, Tajikistan, Kyrgyzstan, Afghanistan, Uzbekistan, Kazakhstan, Turkmenistan, India eight countries.

Xinjiang has 21 million people, constituted of 47 ethnic groups. Compared with the area and population of other provinces, Xinjiang is the thinnest populated province.

The most prominent ethnic group in Xinjiang are the Uyghur people. Their culture and life-style are seen as mysterious by most Han Chinese. Most misunderstandings between the two ethnic groups are caused by two aspects, wrong and unclear information exchanged between the two sides, and different attitude towards religion.

The BRI has an important influence on the development of Xinjiang. As the connecting joint between China and Central Asia, Xinjiang is the entry point for many countries with a lot of potential business opportunities. However, with the speedy development of internet economy, it is hard to estimate how much the new infrastructure and national investments can actually change for Xinjiang.

Urumqi is the capital of Xinjiang. With more than 3 million inhabitants it is by far the biggest city in the province. This leaves Urumqi without competition in the West of China as the population is very scarce. On top of that, the city has advantageous natural position (46 rivers) and rich resources, making its economy and culture develop quicker than other cities in Xinjiang over the years.

However, the terrorist attacks that happened in 2009 changed the situation of Urumqi entirely. The local and Beijing government

had to choose carefully between freedom of economy and the spreading of (muslim) religion, for the sake of stabilizing the society. After terrorist attacks in 2009, the supervision over religious and political views reached the level of totalitarian control. (see appendix for article on current screening in Xinjiang)

Overall the announcement of the BRI so far represented for Chinas domestic affairs a focus on further development of economy and improvement of the quality of life. However, most part of the big BRI investments into Urumqi get used on safety, the one and foremost priority of the local government. Safety is undoubtedly a core condition to be met in order to attract investors from other provinces and countries and as such develop the city and province.

Area

City	583 km2
Metropolitan	14,577 km2

Population (2017)

Metropolitan	3,575,000
City	3,519,600

Ethnicities

Han Chinese	74.91 %
Uyghur	12.46 %
Hui	9.00 %
Kazakhs	2.19 %
Manchu	0.27 %
Mongol	0.34 %
Other	0.80 %



Almaty, Kazakhstan

Almaty is the largest city of Kazakhstan and the former capital of Kazakhstan. In 1997 the national government was moved to Astana and the city became the capital of Kazakhstan. However, Almaty is still the most populated and wealthiest city of Kazakhstan with rich culture and developed tourism.

The relationship between Almaty and Astana is often regarded as competing due to Astana's aspiration to become not only the administrative center but also the most important cultural, financial and economic center of Kazakhstan.

Currently, two cities function as the two parts of a whole. The amount of financial, economic, cultural exchange between two cities cannot be overestimated and overemphasized. It's due to the fact that Almaty remained an important part of the Kazakh economy even after the relocation of the capital. Today, it's still the wealthiest city.

Some of the administrative bodies such as the National Bank of Kazakhstan decided not to move to Astana even after the relocation of the capital because of Almaty's financial and economic importance to the country. Moreover, due to its 1000-year old history, Almaty is dubbed as the cultural center of Kazakhstan, and having the most number of universities, Almaty is also often seen as an educational center the country too.

Area

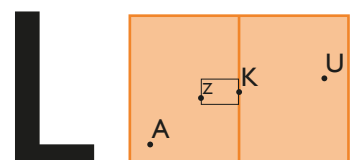
City	682 km ²
Metropolitan	9,395 km ²

Population (2017)

City	1,797,431
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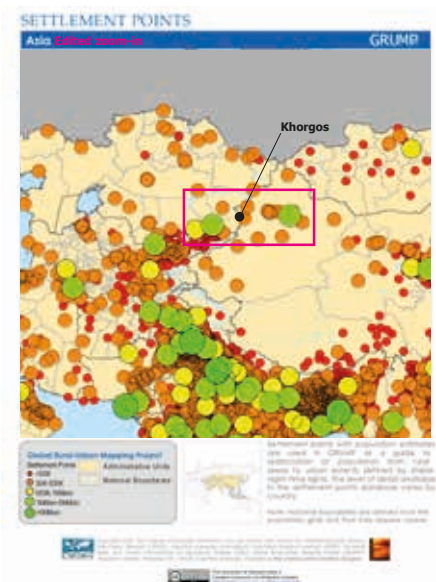
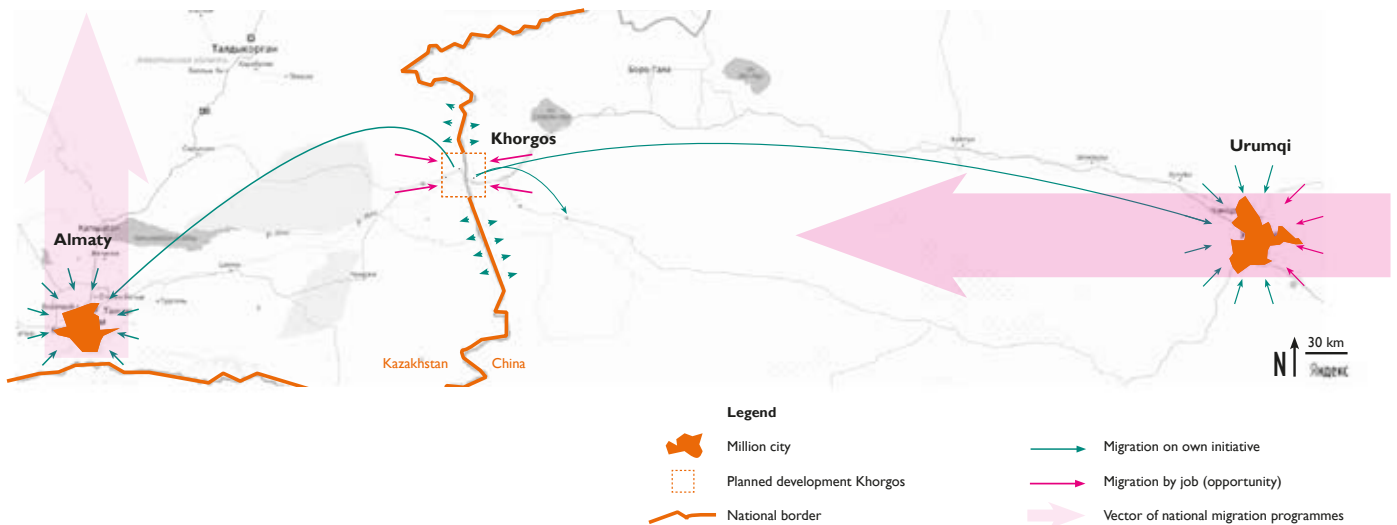
Ethnicities

Kazakh	51.06%
Russian	33.02%
Uyghur	5.73%
Korean	1.90%
Tatar	1.82%
Ukrainian:	1.24%
Others	5.23%

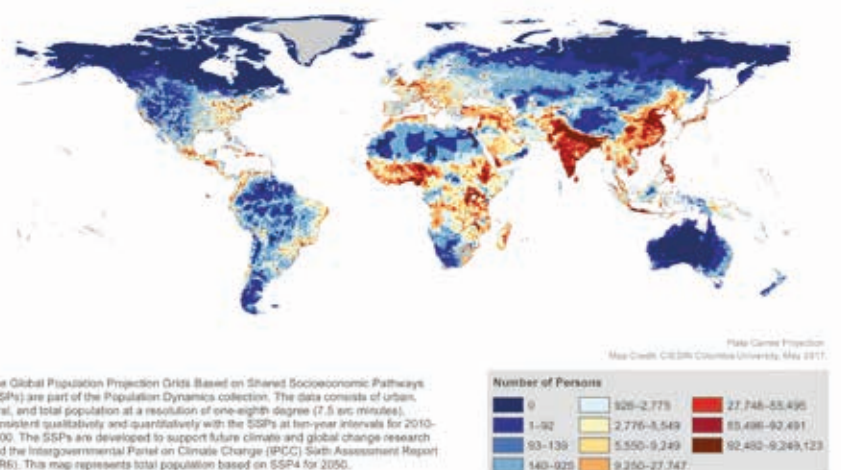


Analysis

Population and migration



Global Population Projection Grids Based on SSPs, 2050: Total Population - SSP4
Population Dynamics



Source population maps: CIESN 2017

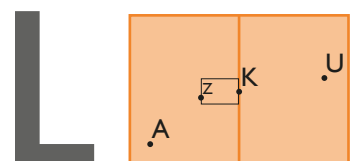
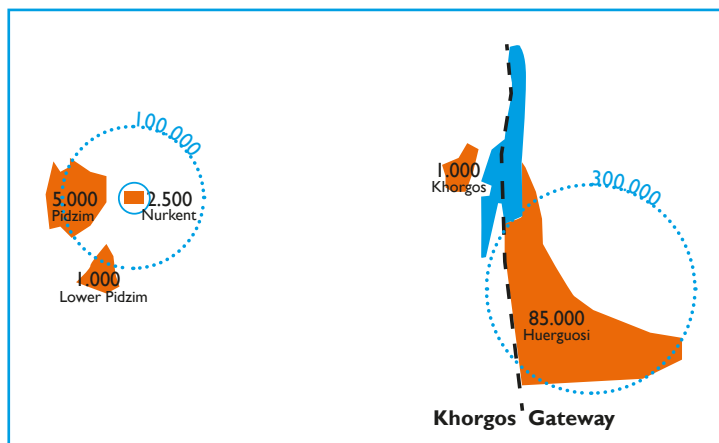
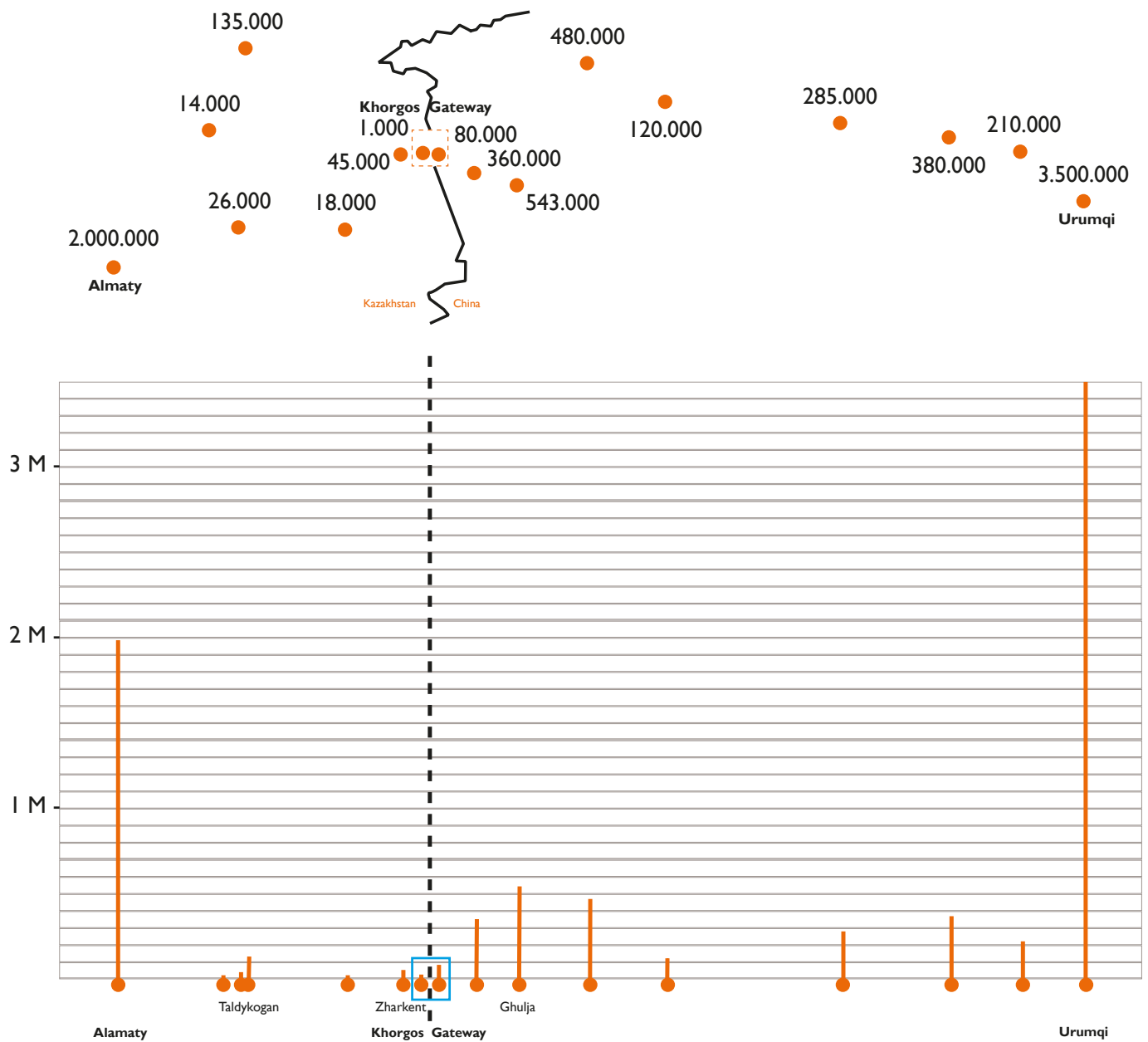
Nevertheless, looking at a bigger scale the population density in the border region is still substantially higher than its surroundings, which gives good hopes. The potential for Khorgos lies in providing conditions for good urban life in addition to the existing job and industrial opportunities.

Dangers and potentials for Khorgos

Khorgos is situated between two big settlement points that are dominant in an area with low density of population. Given the little amount of people and the opportunities the two existing cities already provide, Khorgos needs to provide exceptional conditions to differentiate itself. Economically this already happens with Khorgos SEZ, however it's benefits serve the international scale and for now don't give regional shorter-term benefits, that could attract the few inhabitants to choose Khorgos over Almaty or Urumqi for settlement.

Analysis

Population density



Analysis

Reasons to go or stay

- | | | |
|---|--|---|
| ✓ International shopping and entertainment centers | ✓ Agriculture Industry | ✓ International shopping and entertainment centers |
| ✓ International higher education | ✓ Job opportunities with housing provided | ✓ Job opportunities with housing provided |
| ✗ Air pollution due to Old transport | ✓ Good economic conditions for business | ✓ Higher education |
| ✗ Lack of support for young families | ✗ Remote location No convenient connection | ✗ Safety issues High level control |
| | ✗ No big leisure and entertainment facilities | |



Being the biggest and the most developed cities in their respective regions, Almaty and Urumqi attract many people from surrounding towns and villages.

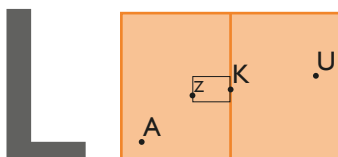
Job and education opportunities are the biggest attractors. Especially for young people and families they are a reason to leave the hometown behind for the big city.

As seen on previous page Khorgos region is quite remote from the two metropolises. Nevertheless local people are willing to travel 6 to 12 hours in for shopping and recreational amenities. Other

reasons for purpose traveling to the two big cities are business and some administrative services (eg embassy, court).

Effect of local culture

Compared to the Western society, Kazakh, Chinese and Uyghur societies are generally much more network oriented and family-bound. For many people I spoke on my journey, both young and old, family and friends were the main reason to stay or to return to their hometown. The only factor that (temporary) can overpower the ties to own network is the necessity for a good income.



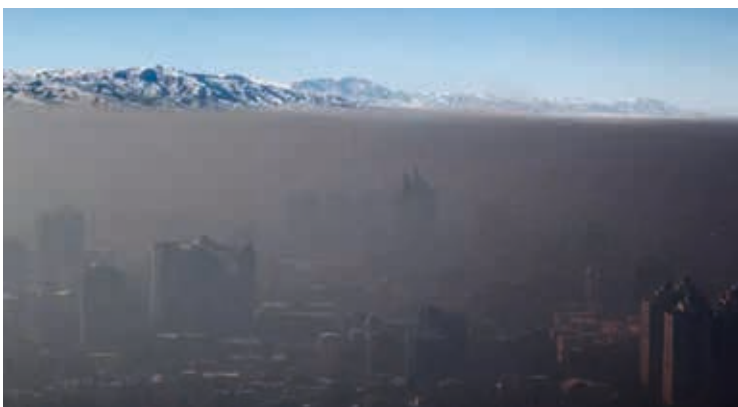
Analysis



Luxurious Shopping mall with international brands in Urumqi.
Source: <http://picsr.com/photos/aurora823/interesting/page16?nsid=7283979@N07>



Shymbulak ski resort in Almaty, distinguishes itself from the mountains near Khorgos not only with its magnificent slopes, as much with it's accessibility and international allure. Shymbulak is the main international attraction of the region together with lake Kapshagay to the north of the former capital. Source: travel pictures by author.



While generally Kazakhstan is known for its clean nature and products, the city of Almaty is heavily polluted by emission gasses of old cars.
Source: <https://earthier.com/common-chemicals-are-a-way-bigger-source-of-air-polluti-1823041752>

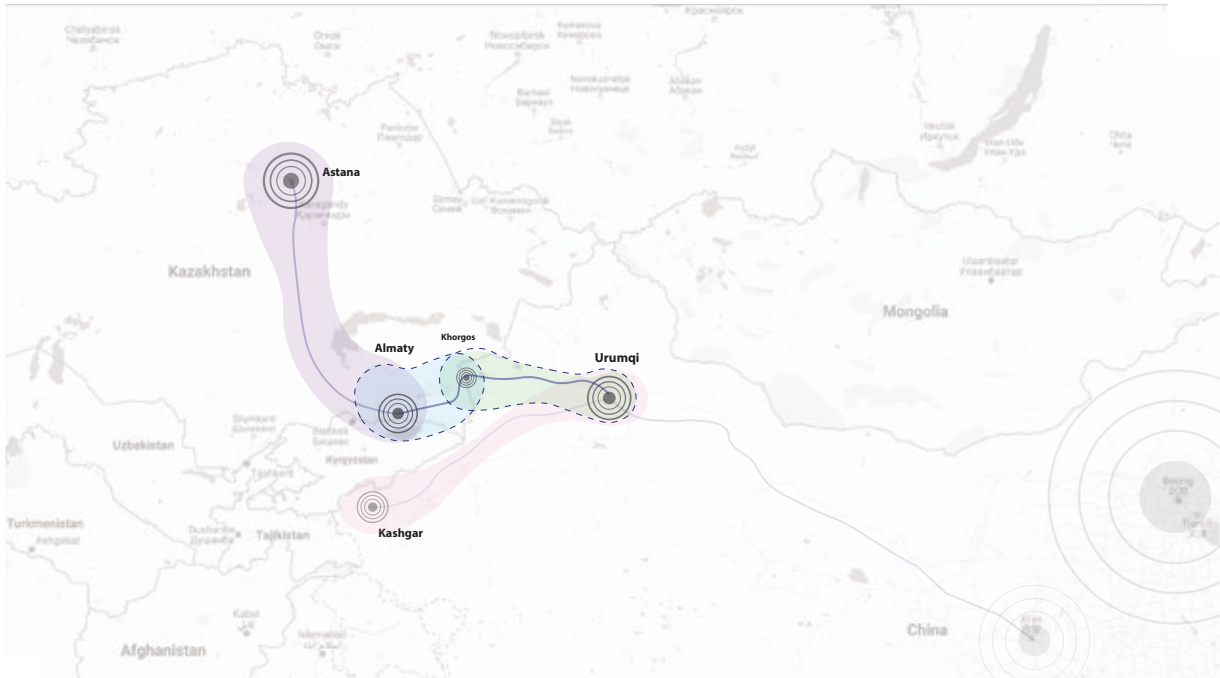


Due to terrorist attacks in the past and wish for more autonomy Xinjiang is being strictly guarded by heavily armed police. Entrance to every public space or living compound is equipped with scanners and quader by security (image above). The city is covered in a dense safety grid of 300 x 300 meter, with at each intersection point a police service post (image below). Source: travel pictures by author



Analysis

Connectivity and transportation



Collaboration zones and potential for polycentric clusters

- Astana - Almaty: existing collaboration tandem
The workings of this tandem have been highlighted in the introduction to Almaty. As two by far biggest cities in the country, they strongly depend on each other.

- Almaty - Khorgos - Urumqi: currently developing collaboration cluster
With establishment of the dry-port and ICBC Khorgos becomes a pivot point between Almaty and Urumqi, China and Kazakhstan




-Urumqi - Kashgar: tandem of two biggest cities in the western region of China.
While Urumqi is the most populated and developed city, Kashgar 1500 km to the south along the border is the city with biggest concentration of Uyghur people, the Muslim ethnic minority of China. Kashgar is also one of the best preserved ancient Silk Route cities.

XL




Analysis

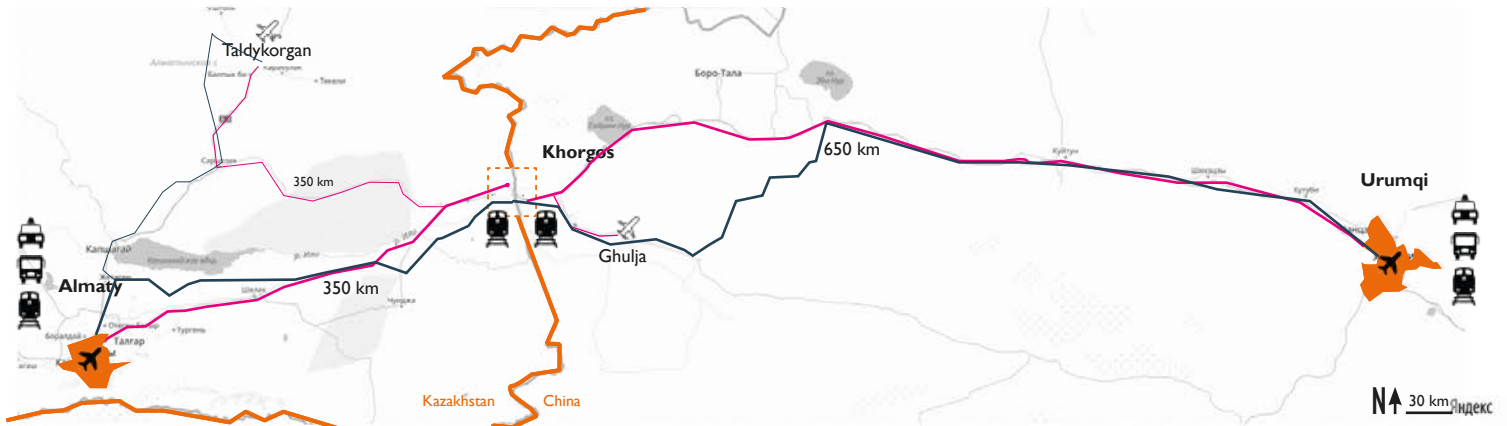
Regional accessibility Khorgos








Almaty - Khorgos

-  Seasonal train, twice a week
Travel time: 5 hours
-  Touring bus every 3 hours
Travel time: 7 hours
-  Taxi / auto-stop / car
Travel time: 4 hours

Urumqi Khorgos

-  Train, once a day
Travel time: 12 hours
-  Touring bus
Travel time: 18 hours
-  Taxi / auto-stop / car
Travel time: 14 hours



- Legend**
-  International airport
 -  Domestic airport
 -  Million city
 -  Planned development Khorgos
 -  National border
 -  Railway line
 -  Fastest automobile route

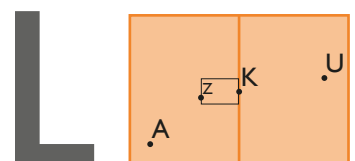
Existing railway networks



Source: <https://www.farwestchina.com/2009/11/xinjiang-railroads-lead-to-nowhere.html>

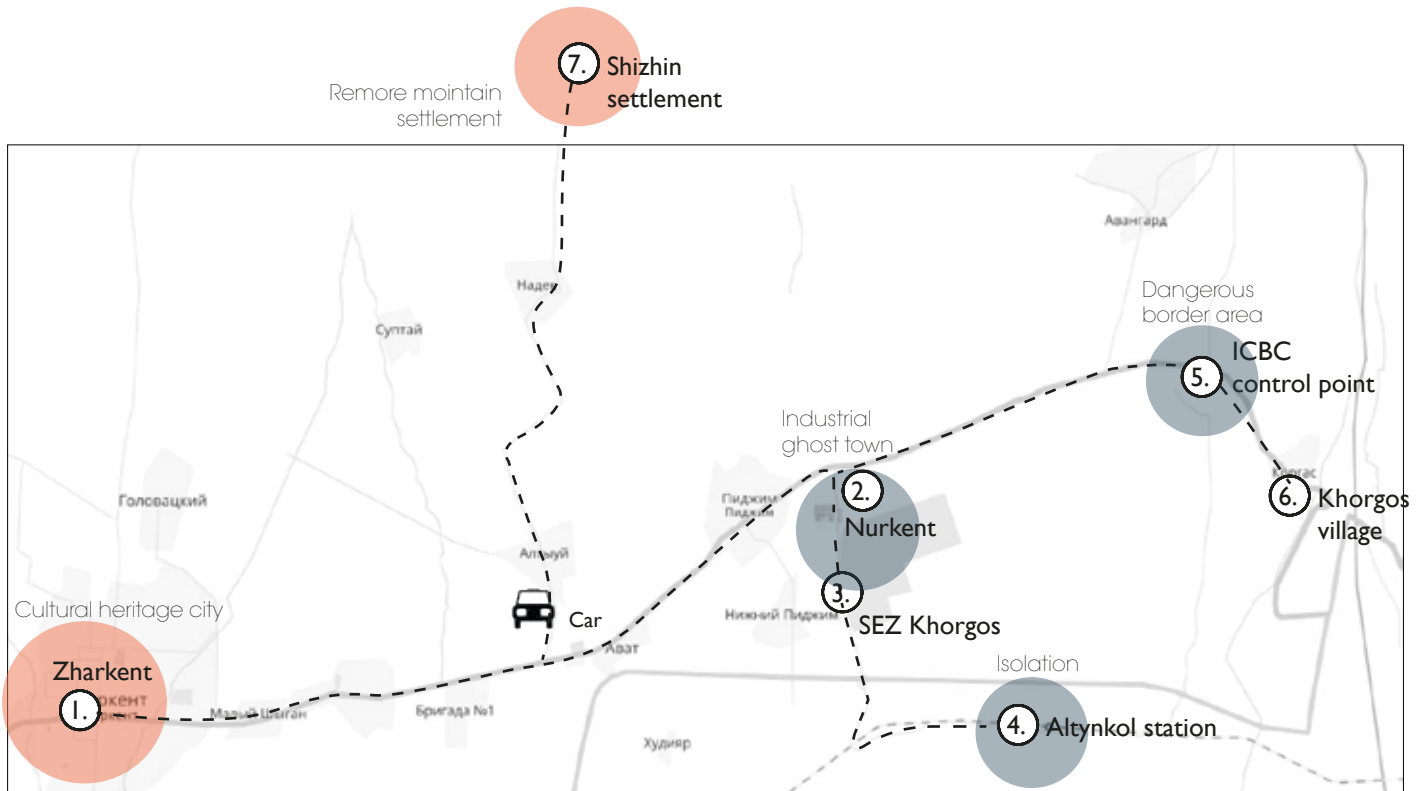


Source: [https://en.wikipedia.org/wiki/Kazakhstan_Temir_Zholy#/media/File:Railway_Map_of_Kazakhstan_\(kk\).png](https://en.wikipedia.org/wiki/Kazakhstan_Temir_Zholy#/media/File:Railway_Map_of_Kazakhstan_(kk).png)



Analysis

Overview Zharkent - Khorgos region



The route of my trip and my impressions of the places I visited.

Zharkent

Zharkent is the centre of the Panfilov district of the Almaty region. Although it was founded in 1881 as an administrative unit, the history of the city goes back to ancient times of the Great Silk Road. Located 35 km from the Chinese border, Zharkent was long used not only as a destination point for travellers and merchants but also as a checkpoint for governing bodies of many states that existed in the Almaty region. Today, Zharkent is a link between China and Kazakhstan connecting the biggest cities of the region: Almaty and Urumqi. Its superb location on the road leading to China has led Zharkent to become the major contributor of trade and cultural relations between Kazakhstan and China.

Trip from Zharkent (1) to Khorgos (6) directly takes 50 minutes



Zharkent Mosque built in 1892. Source, travel pictures author.

The architecture of Zharkent shows the cultural symbiosis that has been going on in the region for centuries. In this area, three ethnicities lived together: Kazakh, Uyghur and Russian people.

Zharkent has both mosques and churches representing different groups of religions.

A hidden gem in the region in the Zharkent Mosque, commissioned by a Zharkent merchant, financed with the help of the local community and designed by a Chinese architect. The mosque combines Chinese and Arabic architecture with Kazakh and Uyghur ornaments. A true symbol of win-win collaboration manifested in space.



Zharkent Church built in 1892 as well. One of the best preserved wooden constructions in old Russian style. Source, travel pictures author.

Analysis

Local identity and strength Zharkent and Khorgos region



Source: travel pictures.



Main entry point to Zharkent. Since five years (just when the New Silk Road, the BRI started to develop) the entrance gates have been changed to represent the distant Silk Route Heritage of the city. Previously there was a monument celebrating the friendship of Kazakh, Uyghur and Russian people, constructed in Soviet era. The next branding of the city we see is the corn billboard (see zoom on the top of the right page), as Zharkent has been famous for its corn in the past and is actively reviving this industry now.



Source: top bottom travel pictures, middle two from bbc documentary 'Khorgos Gateway'

Analysis



Analysis

BRI developments Khorgos region



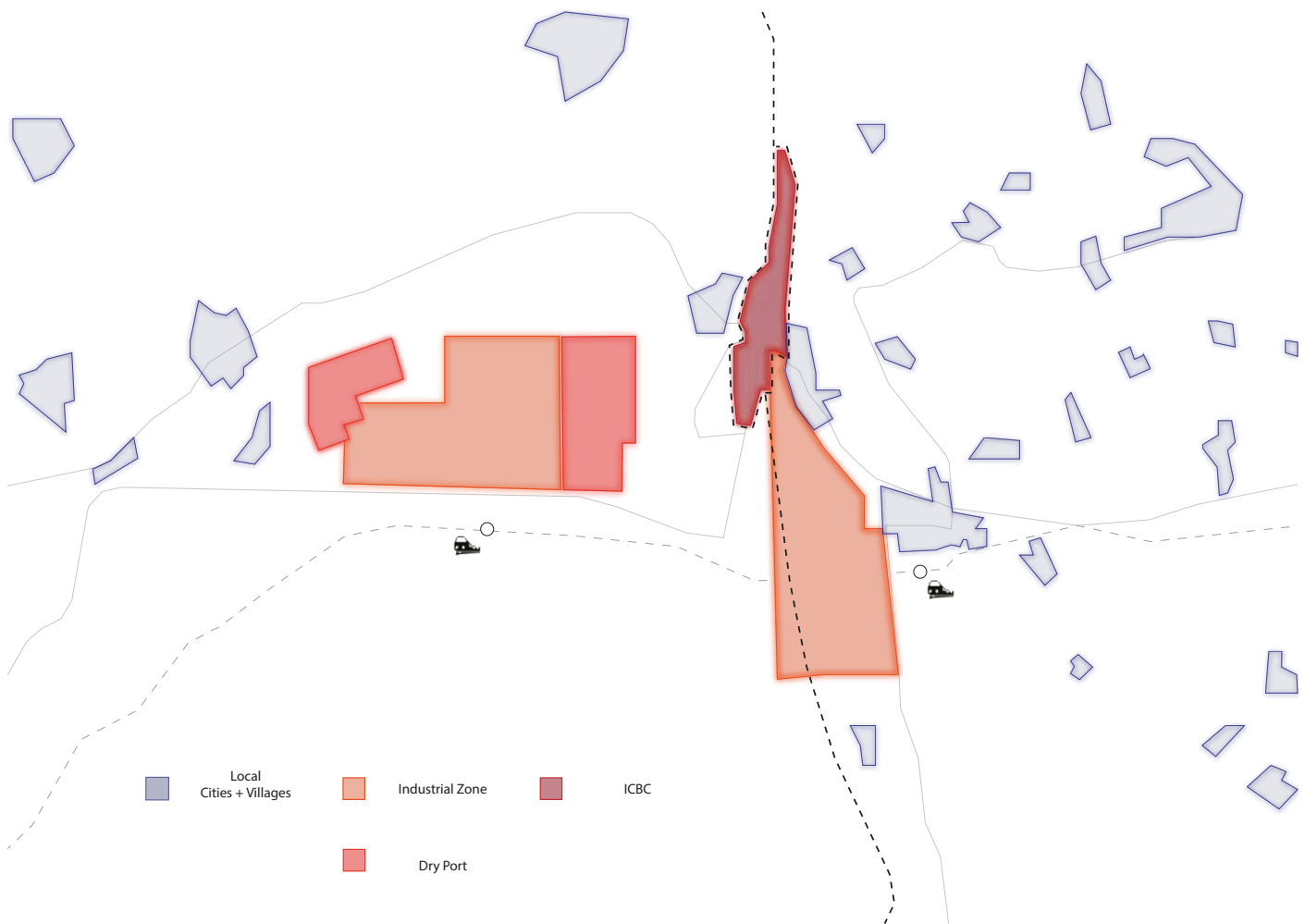
Dry port
Source:: BBC documentary Khor-gos Gateway (2017)



Alashankou railway station
Source: travel pictures



ICBC
Source: travel pictures



Khorgos Gateway developments in the border region

Khorgos Gateway consists of several infrastructural developments; the dryport, the industrial area with special economic conditions (SEZ), the international centre for border cooperation (ICBC) with special visa conditions.

However a more fundamental change for Khorgos - Zharkent region was the construction of the New Eurasian Land Bridge for the BRI of which the highway and the railway were a part of. This infrastructure opened up the remote region to the outside world, transforming it into a strategic centre on Eurasian continent. This gave the opportunity to consider the Khorgos Gateway development

While the international potential still has to be realised, there are some first benefits for the region. Railway provided new business opportunities and proved to be of great benefit for agriculture (for example, farmers can get more fertilizers cheaper and faster). Job opportunities increased, before the BRI developments the jobs were in agriculture, border security and customs and civil service. Now there are new jobs at the dryport, railway station, ICBC and construction sites, as well as emerging factories and industries.

Analysis

Newtown Nurkent for Khorgos Gateway

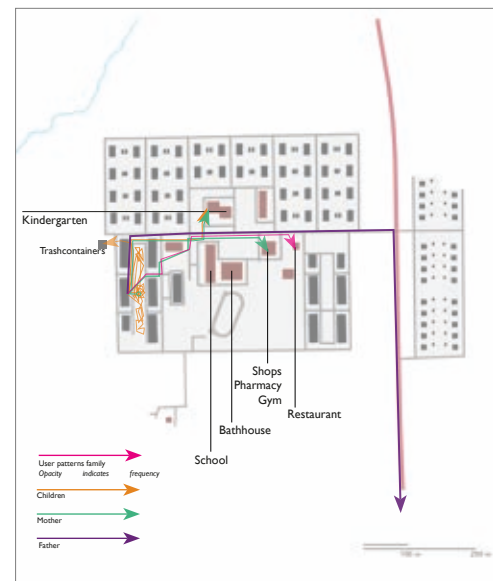


Newtown Nurkent, built in 2013 for workers of the dry-port and the railway
Source: BBC documentary Khorgos Gateway (2017)

Newtown Nurkent

Nurkent (2) was realised in 2013 for the workers of the dry-port and the railway station. The townhouses about 3 thousand residents, predominantly young families of the workers at the dry-port. The settlement, has sports fields, kindergarten, primary school, public bathhouse but no proper building for commercial functions. Currently, a community administration building is housing small convenience shops.

The settlement is reachable by car only, the workers travel between the dry-port and home collectively by a shuttle bus.



Analysis

Newtown Nurkent



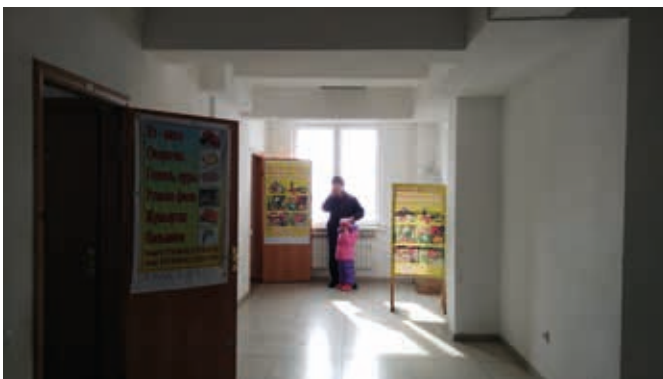
Nurkent, housing and public space



Nurkent, main street



Nurkent, administrative building used as local shopping centre



Nurkent, interiors of the shopping centre, with shops in office rooms

Subregional centre Zharkent



Zharkent, private housing developments



Zharkent, main street



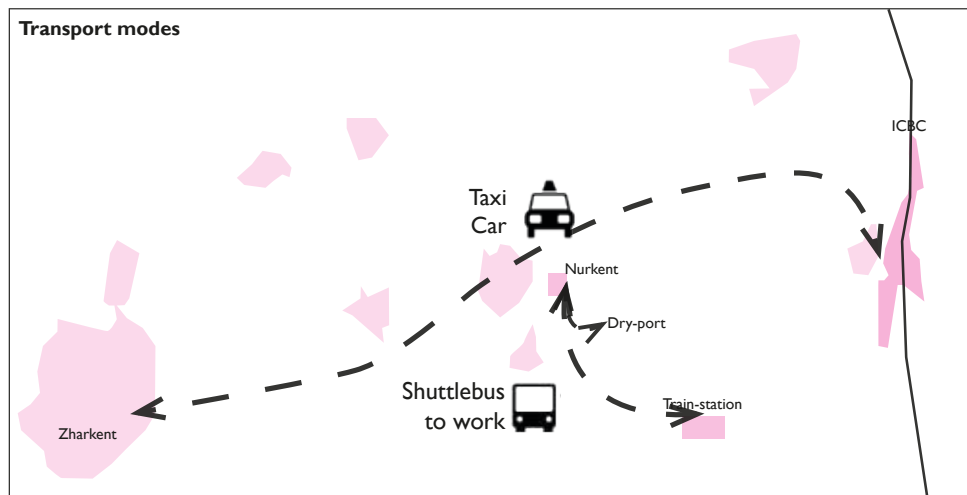
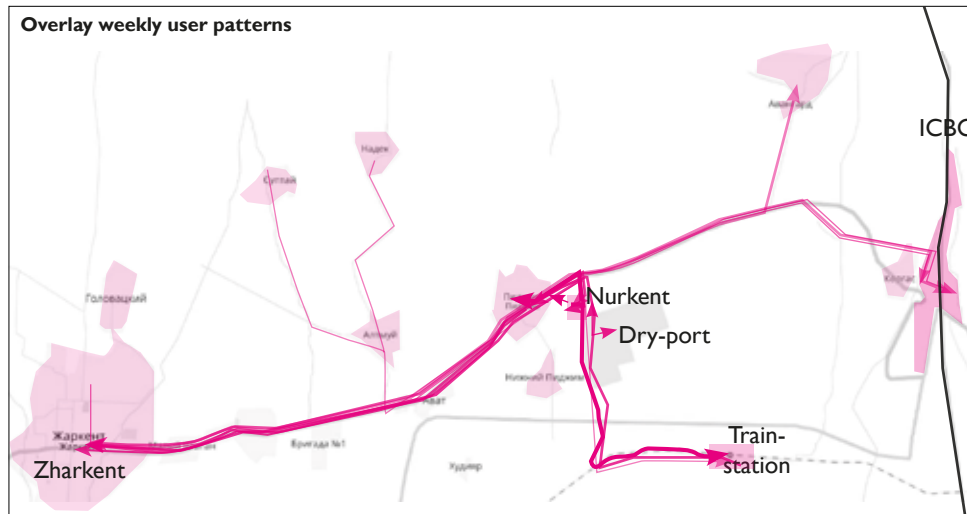
Zharkent, (L) one of the shopping centers, (R) outdoor market



Zharkent, residential area street view

Analysis

Accessibility in Zharkent - Khorgos region



Zharkent the place to be

The compilation of user patterns above is based on conversations with residents of Zharkent, Nurkent and Alashankou train station area. Additionally, I used the stories featured in the BBC documentary about Khorgos Gateway. As such, I created several user profiles; young family in Nurkent, single mothers in Zharkent and Nurkent, young adults in Zharkent, seniors that followed children to Nurkent. The individual patterns of each of them can be found in the appendix.

With no exceptions, all users preferred Zharkent over all other places for its

entertainment and shopping amenities. The residents of Nurkent on average would commute on weekly basis to Zharkent, with younger people willing to go more often in the evenings as well. However, that is only an option for the people that have a car or can afford a taxi that often. Residents of Zharkent would only move to Nurkent for the job and the house and would go back to Zharkent daily for friends, entertainment and shopping.

ICBC is not a desirable destination as it is a lot of effort to get there and so far it only offers cheap Chinese goods, only sales people go there regularly.

Analysis



Secondary road type (not highway) between Zharkent and surrounding villages.
Source: travel pictures



Zharkent and the surrounding area has no buslines. People use taxi or own car.
Source: travel pictures



Donkey carriages are seen frequently in Zharkent and the surrounding villages as alternative for cars.
Source: travel pictures



Shuttlebus between Nurkent and the dryport for workers.
Source: BBC documentary Khorgos Gateway (2017)



Khorgos Village

Kazakhstan
Congress centrum

Chinese ICBC
developments

Kazakhstan

China

Huerguosi Town



View over Industrial area and ICBC on Chinese side from South to North
Source: https://news.cgtn.com/news/3d456a4e34557a4d/share_p.html

Analysis

International Centre for Border Cooperation (ICBC)



Satellite view ICBC and industrial zones development. Source: Yandex Maps

Overview programme ICBC

ICBC is developed as a hub situated between the borders of China and Kazakhstan. Access to the area happens at a fixed point in a similar fashion to the usual border and customs control points. Citizens and visitors of China and Kazakhstan can enter the area without a visa from 7 in the morning till 5 in the afternoon (Kazakhstan time).

The programme of the ICBC includes shopping, trading and business centres, hotels,

exhibition areas, transportation terminals and touristic resorts. So far, the ICBC is under construction, with several wholesale markets and public square open for visitors.

Initial critique (P2 stage):

The proposal for the ICBC is physically isolated from the surrounding context and does not seem to relate to it. The choice of architectural expression and the urban plan does not connect to the local surroundings or customs. The programme has a strong focus towards the international user.



Current plan for the border cooperation centre. Source: <http://mcps-khorgos.kz/en/project/geographical>



Current plan for the border cooperation centre. Source: <http://mcps-khorgos.kz/en/project/geographical>

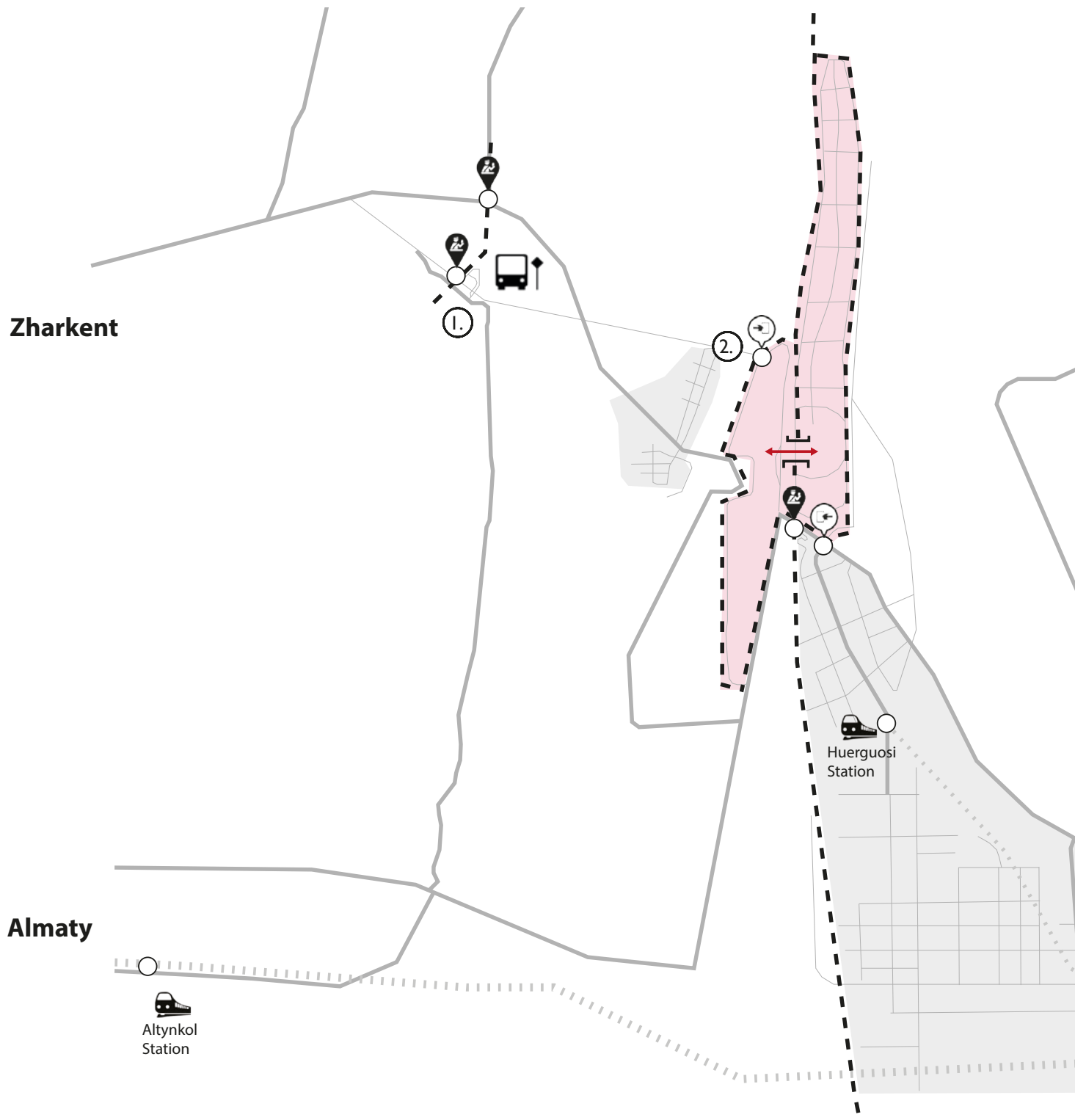
Local perspective towards the ICBC

I found out that among the locals the trading center is seen exactly for what it currently is, a wholesale market for cheap Chinese goods, without much hope for improvement in the future. It would need to be a big luxurious shopping and entertainment center, like the ones built in the 'million cities' Almaty and Urumqi, for it to attract masses of people on daily basis. For now, a visit to ICBC is a day-trip







activity, complicated by long lines and security checks at the customs. On the territory of ICBC trade seems quite one sided for now, with the Chinese selling and the Kazakh buying. The cheap price of goods is worth the hassle for individual customers even though traders are held back by the tight export limits of 50 kg and 1500 euro per person per day. The local markets of Zharkent and the few shops in Nurkent are filled with goods from wholesales in Almaty, Astana or even Urumqi.

Analysis

ICBC permeability: borders and entry points

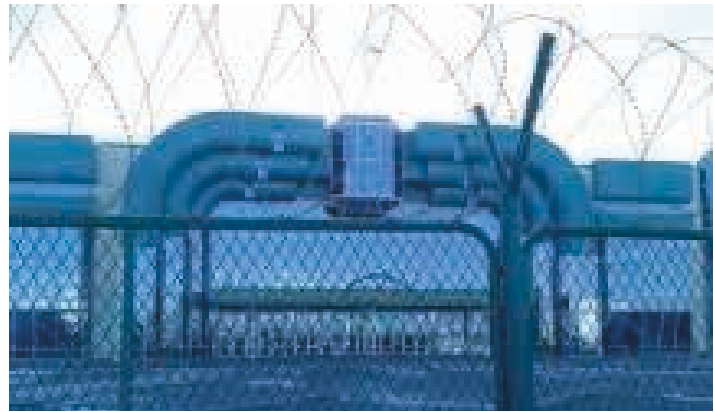


Analysis

-  Border
-  ICBC territory
-  Urbanization
-  Entry point ICBC
-  Border control point
-  Border crossing point



①.



①.



②.



Urumqi

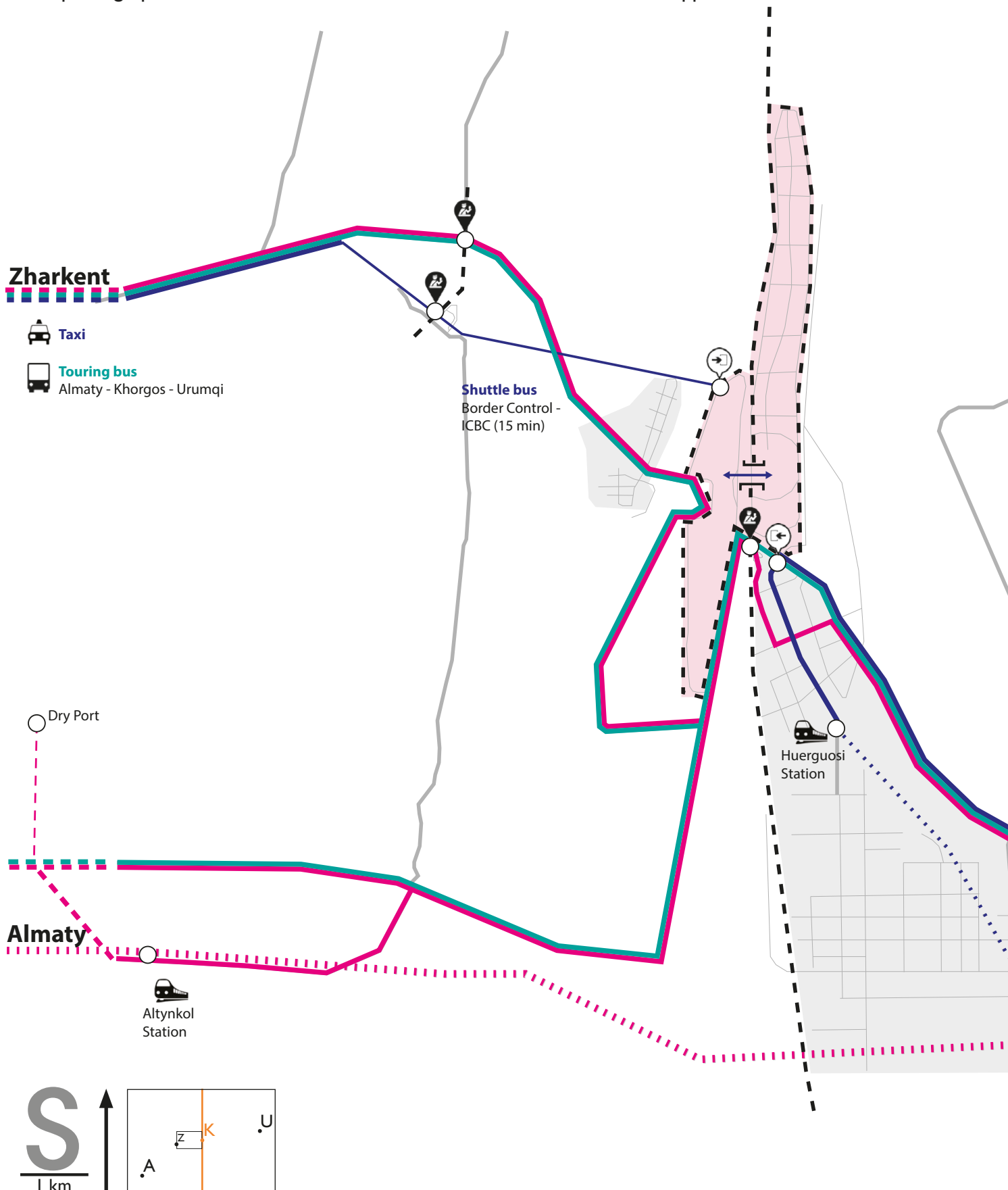
②.










Analysis

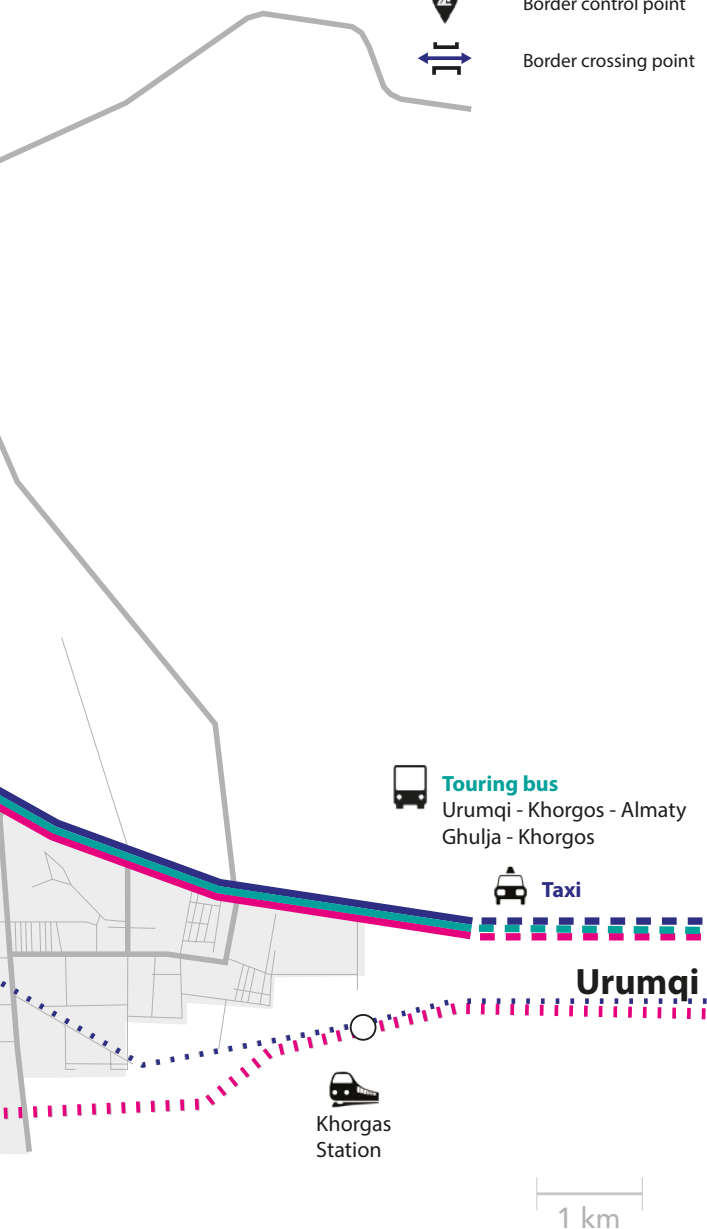
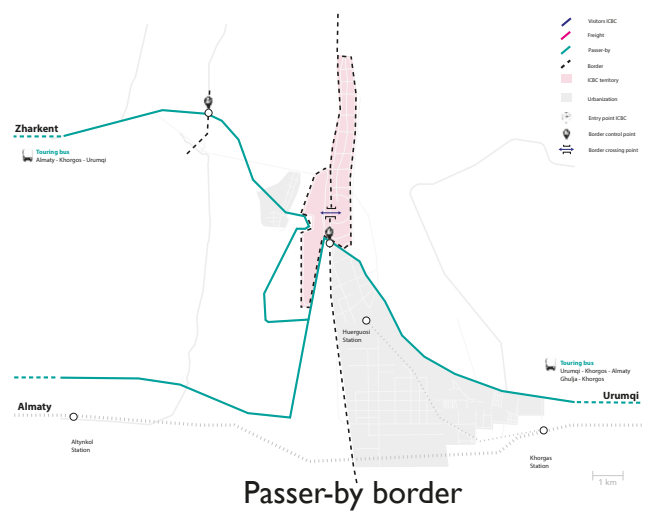
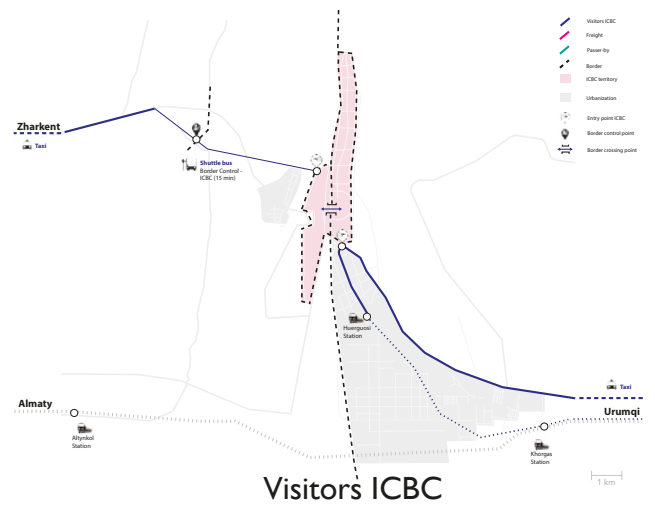
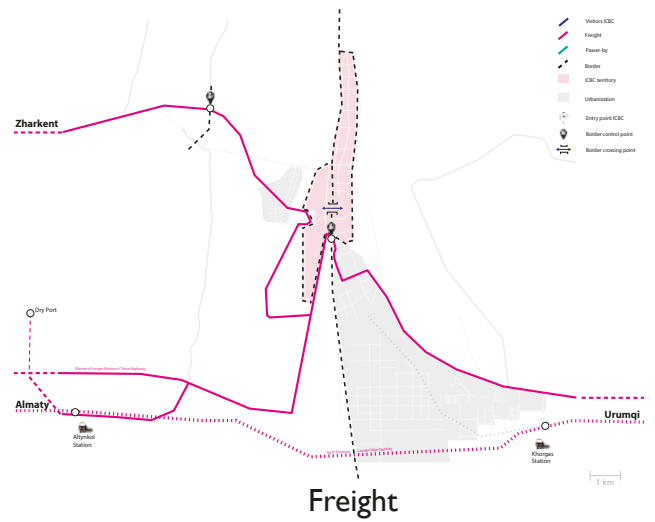
ICBC accessibility: user routes

The three types of user routes were determined based on travel reports, satellite images and photographs of the ICBC. You can find some of these materials in the appendix.



Analysis

-  Visitors ICBC
-  Freight
-  Passer-by
-  Border
-  ICBC territory
-  Urbanization
-  Entry point ICBC
-  Border control point
-  Border crossing point



Analysis



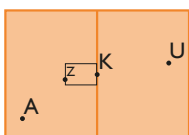
Analysis



Current market at the ICBC.
Source: https://news.cgtn.com/news/3d456a4e34557a4d/share_p.html



Urumqi shows another challenge that ICBC Khorgos might need to battle; empty wholesale markets, that welcomed thousands of people on daily basis just 5 years ago. Digitalization of trading through social platforms like WeChat (Chinese WhatsApp with a digital wallet), made frequent visits to physical malls unnecessary. With further progression of this trend, the brand-new ICBC might suffer the same fate.





Bianhai Wholesale Market in Urumqi is losing its visitors due to digitalisation of trading.
Source: travel pictures by author.

Summary analysis

Conclusions after analysis across scales

XL

The cluster Almaty - Astana is currently stronger than Almaty Khorgos. Almaty - Khorgos - Urumqi is not realising its full potential yet.

The Almaty and Xinjiang regions are rich in Silk Route Heritage, however many sites lack exposure and accessibility.

L

The established Almaty and Urumqi make it hard for Khorgos to compete for visitors and residents in the thin populated region.

Khorgos is not attractive enough yet to go through the effort of inconvenient travelling there.

M

Regardless the free housing and job opportunities in Nurkent, Zharkent is a more attractive city for its culture, entertainment, shopping and freedom to build own housing.

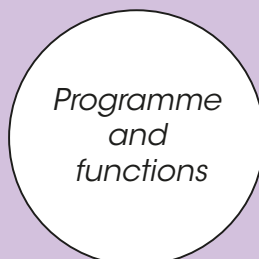
The car-only connection between Zharkent, Nurkent and Khorgos is not optimal and works against the potential of the new developments.

Zharkent and the region used to be strong for agriculture. The BRI gave it a chance to revive but more support is needed to make it the strength of the region again.

S

Programme of the ICBC is not attractive enough for locals.

Accessing the ICBC is inconvenient and paid. Environment is not welcoming, border very hard.



Local People



Like to build their own housing.



Want a big shopping and entertainment mall like in Almaty



Care for their children to get international education



Want to have more meeting places like park, squares and markets.



Need easier/cheaper ways of travelling in the region as villages and new developments are far away from each other.

Recommendations planning & design

1. Add functions to Khorgos ICBC that will make it an attractive destination for local and regional visitors. For example a shopping and entertainment mall that can compete with the ones in Urumqi and Almaty.
2. Make the Silk Road Heritage visible and accessible.
3. Make the ICBC easy to access for locals and for internationals.
4. Leverage the strength of the border region, to further support the potential of the Khorgos Gateway.
5. Provide reasons and place for interaction in the emerging settlements and new developments.
6. Take local needs and customs in consideration and make space for them.

Literature overview	page 105
every paper abstract	page 110
BRI as a carrier of urbanisation	page 111
Challenges for the BRI	page 112
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Introduction: literature overview

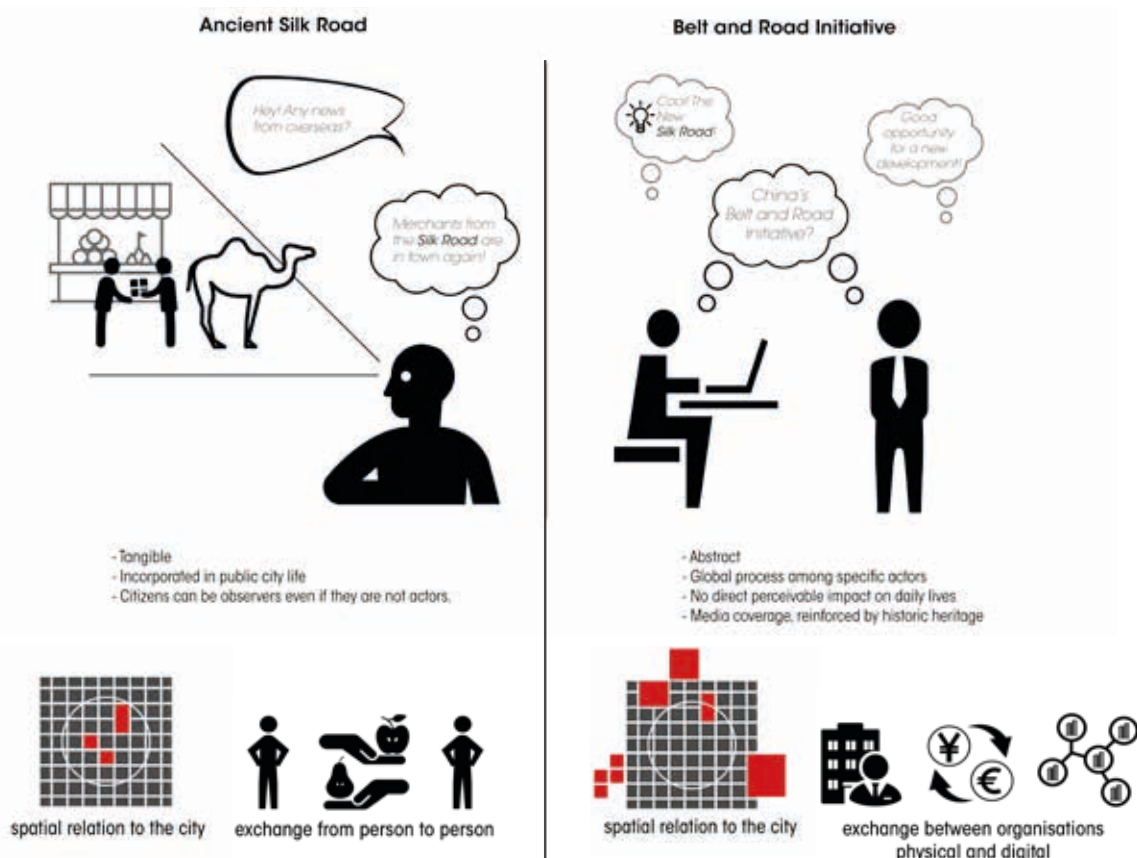
Throughout the research process, a wide scope of literature was consulted in order to understand and define a set of relevant problems. The first part of this section provides an overview of the literature that shaped the research and design process. The second part presents excerpts from the theory paper in which urbanism issues of the BRI are defined.

Comparing the BRI and the Ancient Silk Road

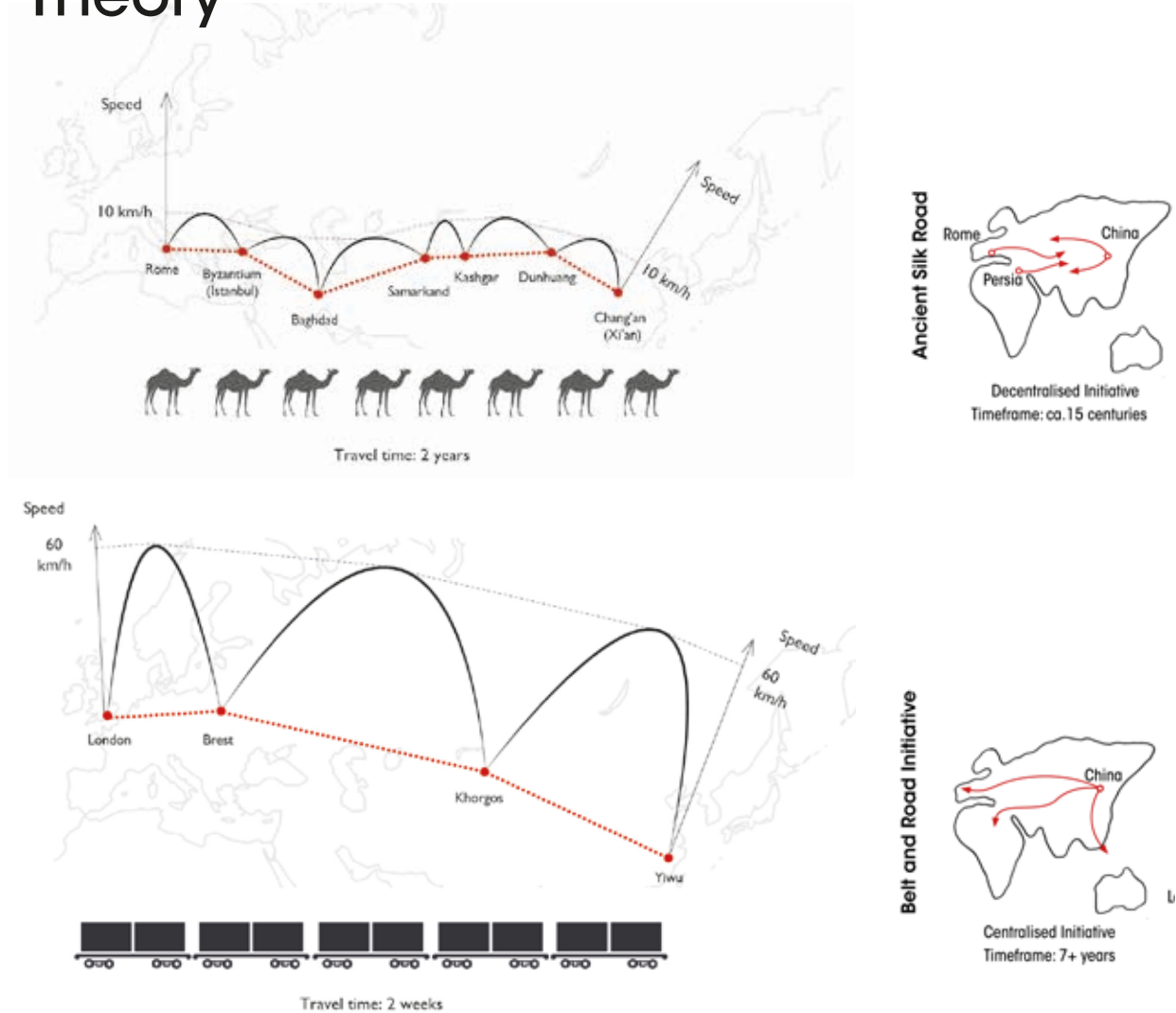
While the BRI is promoted as the conceptual follow up of the Silk Road, the link between the two phenomena limits to the name, geographic scope and trade. The BRI is a top-down development actively promoted and executed by China. The Ancient Silk Road was an organic bottom-up process initiated from both East and West exploring each other. It took centuries of exchange for the network to establish, but it is this luxury of time that made it possible for the vibrant multicultural

Silk Road Cities, the first megapolises, to take shape. Today these cities are part of the Eurasian cultural heritage and symbol of cultural exchange and trade where the Silk Road history took place at the heart of public life, in markets and squares. The contemporary BRI, on the other hand, is intangible and abstract consisting of economic agreements and big infrastructure and separated from city life. Therefore it needs the legacy of the Ancient Silk Road in order to spark the imagination and communicate its aims. The success of the Ancient Silk Road exemplifies that a win-win collaboration needs to be grounded in space becoming a part of daily city life.

- Frankopan, P. (2015). *The Silk Roads. A New History of the World*. Bloomsbury Publishing.
- Simpfendorfer, B. (2011). *The New Silk Road. How a Rising Arab World is Turning Away from the West and Rediscovering China*. (2nd ed.). New York: Palgrave Macmillan.
- Liu, W., & Dunford, M. (2016). Inclusive globalization: unpacking China's Belt and Road Initiative. *Area Development and Policy*, 1(3), 323–340.



Theory



Comparison of timeframes between the Ancient Silk Road and the BRI. Contemporary urban developments in context of the BRI face the challenge of much shorter timeframes comparing to their historic predecessors. Image by author.

Positioning in relation to 'culture'

Culture is an extremely rich concept that is getting more and more attention to urban planning and design literature. In the scope of this thesis, culture is addressed from two perspectives: social interaction between people and the sense of place defined by geographical conditions and tangible and intangible cultural heritage. To make collaboration happen, the ultimate objective behind each BRI development, interaction between (groups of) individuals needs to be facilitated through space. The sense of place shaped by the physical forms of the built environment and layers of history faces transformation when global forces touch the ground in the local context. In case of a mega-project like the BRI, it becomes crucial to take into consideration

the conditions and users that shape the place in order to come to balanced decisions and avoid erasure of the local identity.

- Talen, E. (2012). Latino Urbanism: defining a cultural urban form. *Journal of Urbanism: International Research on Placemaking and Urban Sustainability*, 5(2-3), 101-110.
- Young, G. (2008). The Culturised System's Research Method. In *Reshaping Planning with Culture* (p. 92). Ashgate Publishing, Ltd.
- Stedman, R.C. (2003). Is it really just a social construction?: The contribution of the physical environment to sense of place. *Society & Natural Resources*, 16(8), 671-685.
- Gellert, P. K., & Lynch, B. D. (2004). Mega-projects as displacements*. *International Social Science Journal*, 55(175), 15-25. <https://doi.org/10.1111/1468-2451.5501002>

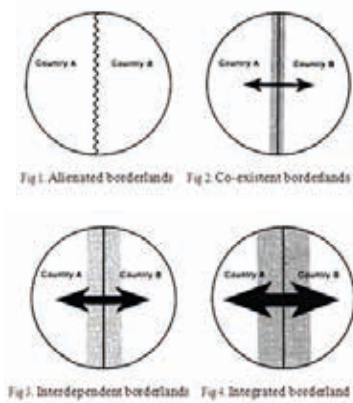
Border-condition

In the case of Khorgos development, the border is figuratively and physically at the centre of the issue of collaboration. Martinez (1994) defines four kinds of border conditions with varying degrees of interaction.

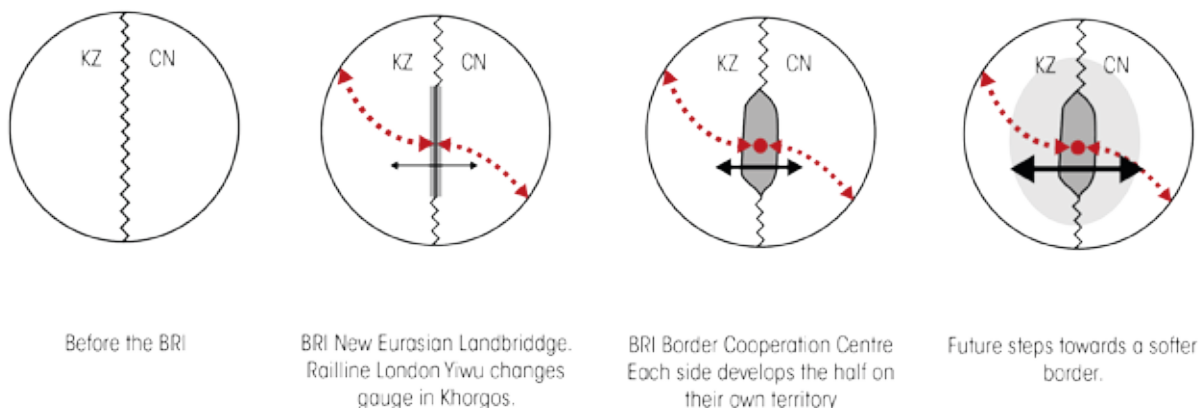
The ICBC is a unique phenomenon, space between borders, designated for interaction. While on paper, it raises the expectation of 'interdependent borderlands' where both sides are symbiotically linked with each other, in reality, it is enclosed with the regular hard national border, in best case reaching the 'co-existent borderlands' state with balanced input from both sides.

Considering the BRI-ideal of win-win collaboration, ICBC would need to aim for the stage of 'integrated borderland' which fundamentally questions China's willingness to open up their borders this much.

- Martinez, O. J. (2002). The dynamics of border interaction new approaches to border analysis. In *Global Boundaries* (pp. 19-33). Routledge.



Dynamics of border interactions by Martinez (1994). From closed border (left) to open border (right).



Martinez' (1994) border classification applied to analyse the development of ICBC. Image by author.

Collaboration

The core objective of the Belt and Road Initiative is an innovative collaboration between nations. A recent example that is the closest in scale to the BRI is the formation of the European Union. Over the past 15 years, the EU dedicated a lot of efforts towards coordination of spatial development across the intangible borders between member states.

EU example shows that political collaboration needs support and stimulation through spatial development. Principles of territorial cohesion,

complementarity, polycentric development and subsidiarity are relevant for the future development of the BRI.

- Nadin, V., & Stead, D. (2008). European spatial planning systems, social models and learning. *disP-The Planning Review*, 44(172), 35-47.

- Nadin, V. (2001) A spatial vision for north-west Europe: Impacts and opportunities. In: *Polycentric Development, EURBANET conference*, Rotterdam, The Netherlands, April, 2001. Available from: <http://eprints.uwe.ac.uk/9490>

- Faludi, A. (2006). From European spatial development to territorial cohesion policy. *Regional Studies*, 40(6).

Theory

Placemaking

Placemaking is an approach and philosophy focusing on 'a local community's assets, inspiration, and potential' (PPS, n.d) and is mostly applied to a neighbourhood scale.

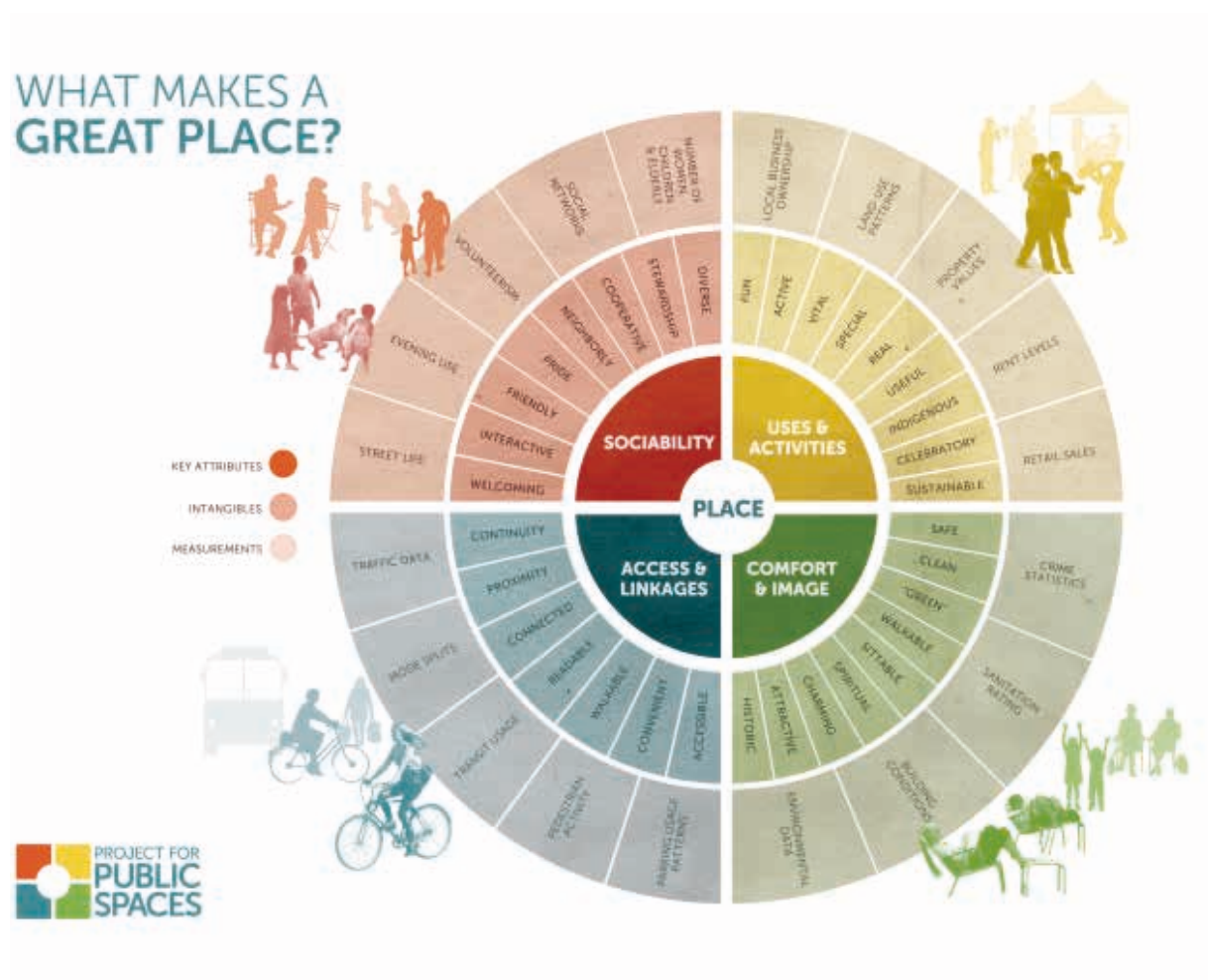
A placemaking process involves intensive communication between the local community and decision-makers and is an interactive design process. Although cases all over the world prove this community-oriented approach to bring about positive impact, its downside in light of globalisation is the relatively slow process of decisionmaking.

Nevertheless, for a mega-project like the BRI bearing a huge transformative potential, the core of placemaking philosophy - identifying and strengthening the local assets, are of crucial importance when it comes to creating true win-win solutions for both global and local parties involved.

The challenge lies in translating the core-values of placemaking from neighbourhood to cities and (mega)-regions. The key lies in creating engagement by tailoring the new developments to work in symbiosis with the existing.

- Project for Public Spaces (online platform)
- Kermani, A. A. (2016). Developing a Framework for Qualitative Evaluation of Urban Interventions in Iranian Historical Cores. *A+ BE: Architecture and the Built Environment*, 6(10), 1-212.
- Montgomery, C. (2013). *Happy City: Transforming Our Lives Through Urban Design* (1st ed.). UK: Penguin Books.
- Wu, F. (2000). The global and local dimensions of place-making: remaking Shanghai as a world city. *Urban Studies*, 37(8), 1359-1377.

Placemaking wheel: 'The inner ring represents a place's key attributes, the middle ring its intangible qualities, and the outer ring its measurable data.' (PPS, n.d.) Retrieved from: www.pps.org



Globalisation trends

The UN predicts the world population to increase by 8.5 million by 2030. Two-thirds of these people will live in cities (UN, 2015). Housing all these people is a big challenge for cities today already. However, the needs of the millennials prove to be different from the generation before. As we feel lonelier in the digitalising fast-paced world, the urge to share experiences with other people becomes bigger.

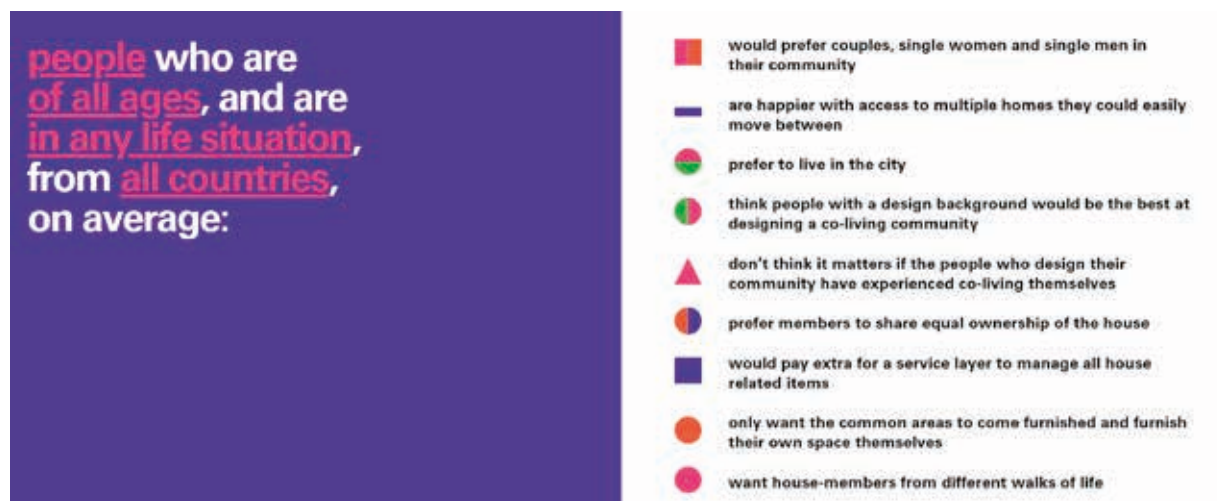
This leads a new trend to emerge among today's young adult generation - living in communes. A concept that humanity has known for millennia, is relevant again for people that prefer not to settle down. Increasing the speed at which we can travel makes it even easier.

At the same time, this is an opportunity for cities to use the built space more efficiently to house the increasing influx of people. More and more architecture and urbanism offices design proposals for co-living. IKEA research lab LAB10 set up a platform to provide a framework for co-living housing development in the future and conduct research on users preferences. Perhaps, the commercial buildings that lose their value due to digitalising shopping and trading, are a space for intervention.

- Beckman, J. (2018, March 21). The roaming empire. 1843 Magazine, (April-May 2018). Retrieved from <https://www.1843magazine.com/features/the-roaming-empire>
- Bridle, J. (2018, February 21). The Rise of Virtual Citizenship. *The Atlantic*, (January/February 2018). Retrieved from <https://www.theatlantic.com/technology/archive/2018/02/virtual-citizenship-for-sale/553733/>
- One Shared House 2030 by IKEA (online survey platform)
- United Nations, Department of Economic and Social Affairs, Population Division (2015). Population 2030: Demographic challenges and opportunities for sustainable development planning (ST/ESA/SER.A/389).



IKEA's LAB10 is conducting an ongoing research on preferences of co-living. Results so far are based on about 80.000 respondents. More at: <http://onesharedhouse2030.com/survey/>



The Belt & Road Initiative through the Lens of Urbanism

A brief introduction of China's Belt and Road Initiative for urban planners and designers.

Abstract

The theory paper aims to address the gap in the emerging body of literature on China's recently announced Belt and Road Initiative (BRI), covering this topic from the perspective of urban planning and design. The paper provides a comprehensive overview of the current state of the BRI and its instruments; explores the challenges relevant from the perspective of urban planning and design; and discusses BRI's possible role in a new wave of urbanisation.

Existing body of urbanism literature offers useful concepts and tools to guide the BRI development, but the knowledge needs to be integrated into a practical system adapted to the BRI context. This introductory paper is a call for action towards further, systematic research of the BRI and the urbanisation it is about to trigger.

For full paper refer to the appendix.

BRI as a carrier of urbanisation

Previously I identified the different political, economic, social and spatial instruments the initiative consists of. Precedents show that urbanisation and economic growth go hand in hand together. Historically, increasing trade would promote development of the cities, as happened in case of the Ancient Silk Route, the conceptual predecessor of the BRI. However nowadays, the

reverse happens too, where new urban developments are used to attract investors and as such boost the economy of a certain region. Industrial and technological new-towns, like Konza Techno City in Kenya and Eko Atlantic development in Nigeria are just some examples of such practice (Marcinkoski, 2017).

The case of Khorgos Gateway shows how new trade agreements and infrastructure provide opportunities for development and growth of new places, but it also exemplifies the role of new urban settlements as facilitators subservient to these economic developments. As such it is highly likely that the BRI generated urban environments will be of the same kind as the large-scale urban developments that happened in China the past 20 years and are rising up across Africa, Asia and the Middle-East today. Habracken (2016, p. 58) criticizes such repetitive and uniform built environments to misfit the contemporary 'society that prides itself on freedom of self-expression'. Taking into account that this social trend will continue and globalisation will diversify our

communities even further, I would like to believe that by reviving the Ancient Silk Routes through the BRI, we can rethink current urbanisation to generate urban environments as vibrant and multicultural as the ancient megapolises the Silk Road became famous for. To do so, first of all urban environments should be revalued as core places for human interaction. Social and spatial relations are mutually constitutive (Soja, 1985, p. 177). In one way space reflecting the social relations is produced and reshaped by social practice, in another way space itself, giving body to social relations creates a place for their existence. For example phenomena like slums, are a spatial reflection of polarization that starts in society and economy (Holston, 2001, pp. 333–340). We should know that space can support this polarization to develop further, but also that it can be the key to breaking out of vicious cycle and that we should anticipate this by creating fairer places.

The BRI bears the potential to carry this change, as good infrastructure and economic conditions provide a stable base to develop from. But urbanisation as a process needs a prominent place on the BRI agenda too, as there are various challenges the BRI might face.

Theory

Challenges for the BRI

BRI as a cross-continental megaproject (Gellert & Lynch, 2004, p. 15) aiming for improved connectivity and collaboration will fundamentally be challenged by tangible and intangible borders. As a spatial phenomenon, borders embody the fronts of less distinct differences between political, economic and cultural contexts. The research on the complex relationship between social and spatial problems of border regions has emerged into the field of border studies (Anderson & O'Dowd, 1999; Brunet-Jailly, 2005; Kolossov, 2005; Newman, 2003), providing context and frameworks for studying and developing border regions. In practice, when it comes to the challenges of cross-border cooperation, I find EU to be the most relevant precedent for the BRI. The case of EU spatial development shows how after the physical borders between the individual countries got alleviated, it took almost two decades to bridge different social, economic, political and spatial cultures in order to reach a deeper and more active level of collaboration. This happened through active development of collaboration programs among which INTERREG and large-scale spatial planning initiatives like ESDP (Dühr et al., 2007), through which collaboration manifested in space.

In case of BRI, the physical borders between partnering countries, are not to disappear anytime soon. Although BRI's infrastructural and political elements successfully cross the national borders, the non-

physical, cultural in the broadest sense of the word, barriers may be stronger than the ones Europe dealt with. Exemplary here are China's own borders: strictly controlled, impermeable boundaries protecting a culture and political system that puzzles the outside (western) world. With the BRI China aims to spread Chinese values and culture (Li, 2017), and as such demystify itself and become facilitator of international collaboration. However, before getting there, the main question remains whether China can break out of its own boundaries, in a way that goes beyond business, through spatial expression that reflects the harmonious win-win approach.

Another great challenge lies in coordination of developments: horizontally between countries and vertically across the different scales. In its current proposals the BRI has a clear focus on horizontal coordination. In case of Khorgos Gateway coordination is visibly lacking in both directions. The big plan to jointly develop a cross-border hub, resulted in two groups of developments on each side of the border that are happening with contrasting speeds; fast on the Chinese side and slow on the Kazakhtan side. On the Kazakhstan side the challenges for vertical collaboration become vivid, as the separate objects of one plan, developed by different companies rise up in isolation from each other.


Role of spatial planning and design in context of BRI

The strong focus on connectivity and collaboration the initiative carries, the main role of spatial planning and design in context of the BRI is to facilitate collaboration across boundaries and throughout scales. Visions, strategies, plans and programmes on transnational, regional and local scales are needed to direct the efforts, negotiate the conflicting interests and create cohesive environments (see figure 3).

When shaping urban environments and implicitly the social interactions that will take place within them, urban planners and designers take on the role of mediators between the diverse stakeholders involved. The BRI involves an extremely wide range of actors, varying from national governments all the way to

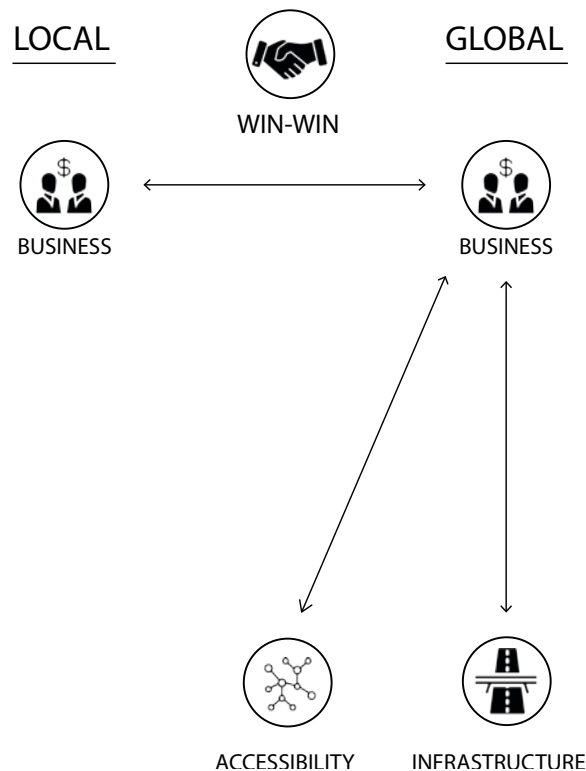
local users. Especially in case of BRI it is important for us to search for and maintain a balance between the global and the local forces as the city is an entity that is shaped by both (Wu, 2000).

Going further, urbanists need to develop new types of urban forms and configurations so that emerging BRI-developments can be more than industrial and logistic hubs but become qualitative environments of a new kind. Crucial here would be to understand and respect the local context, mixing different scales of urban developments according to function, local user patterns and landscape.

BRI Goals	COLLABORATION						
	Financial integration	Unimpeded trade	Policy coordination	Connectivity	People to people bonds		
BRI Instruments	Politico-Economic Instruments			Physical Instruments	Socio-cultural Instruments		
	Capital loans, Technical financial instruments.	Economic corridors, trading agreements.	Diplomatic agreements, policy programmes.	Nodal infrastructures: Roads, Railways, Ports, Airports, Telecommunications networks, Pipelines, Development Zones and Cities.	Silk Road cultural legacy, Educational programmes, Cultural exchange programmes, Chinese Culture Institutes.		
			Special Economic Zones				
Spatial Planning and Design Tools			Trans-territorial Vision, Spatial Development Perspective.			XL	Spatial Cohesion across borders and scales
			Structural Visions, Polycentric Development Strategies, Cross-border Cooperation Programmes.			L-M	
			Embedding Infrastructure	Placemaking	Urban Interaction Design	S	

Synthesis findings

Current mechanism behind BRI 'win-win' collaboration

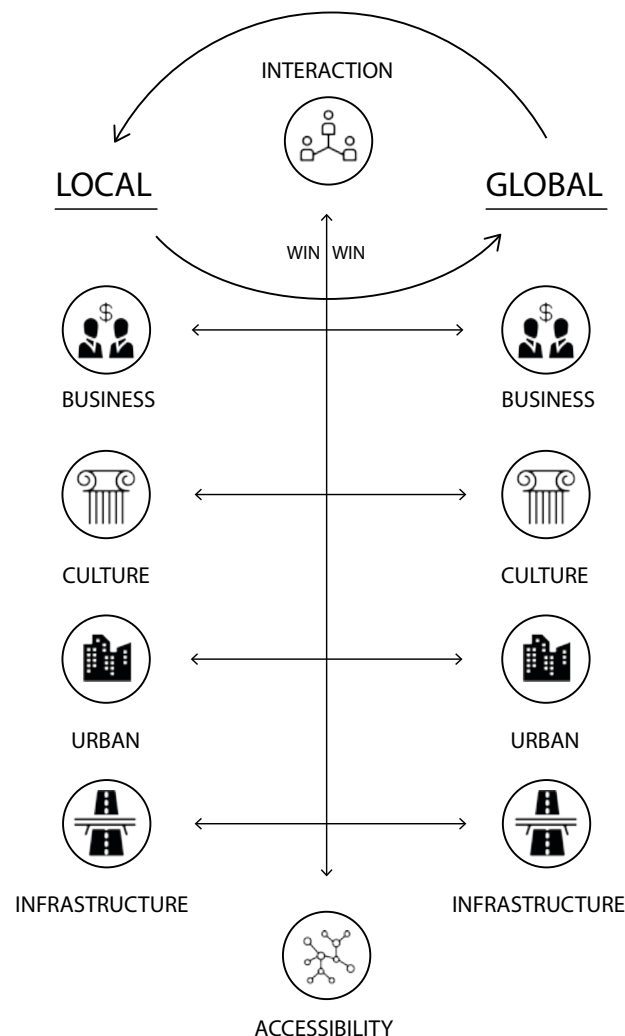


Current approach China handles to develop collaboration through the Belt and Road Initiative boils down to the provision of global infrastructure for the sake of global economic development. The assumption here is that connecting the local environment to the global network and stimulating global trade, naturally brings benefits for all parties involved, both local and global across borders.

Credits must be given to the BRI efforts so far as accessibility is a crucial aspect of facilitating interaction. However, the case of Khorgos Gateway where this mechanism has been applied and took effect for several years already, illustrates that infrastructure and job opportunities alone, are not enough. For a true win-win collaboration to happen there needs to be a dialogue between the global and local contexts in the social and spatial realm as well.

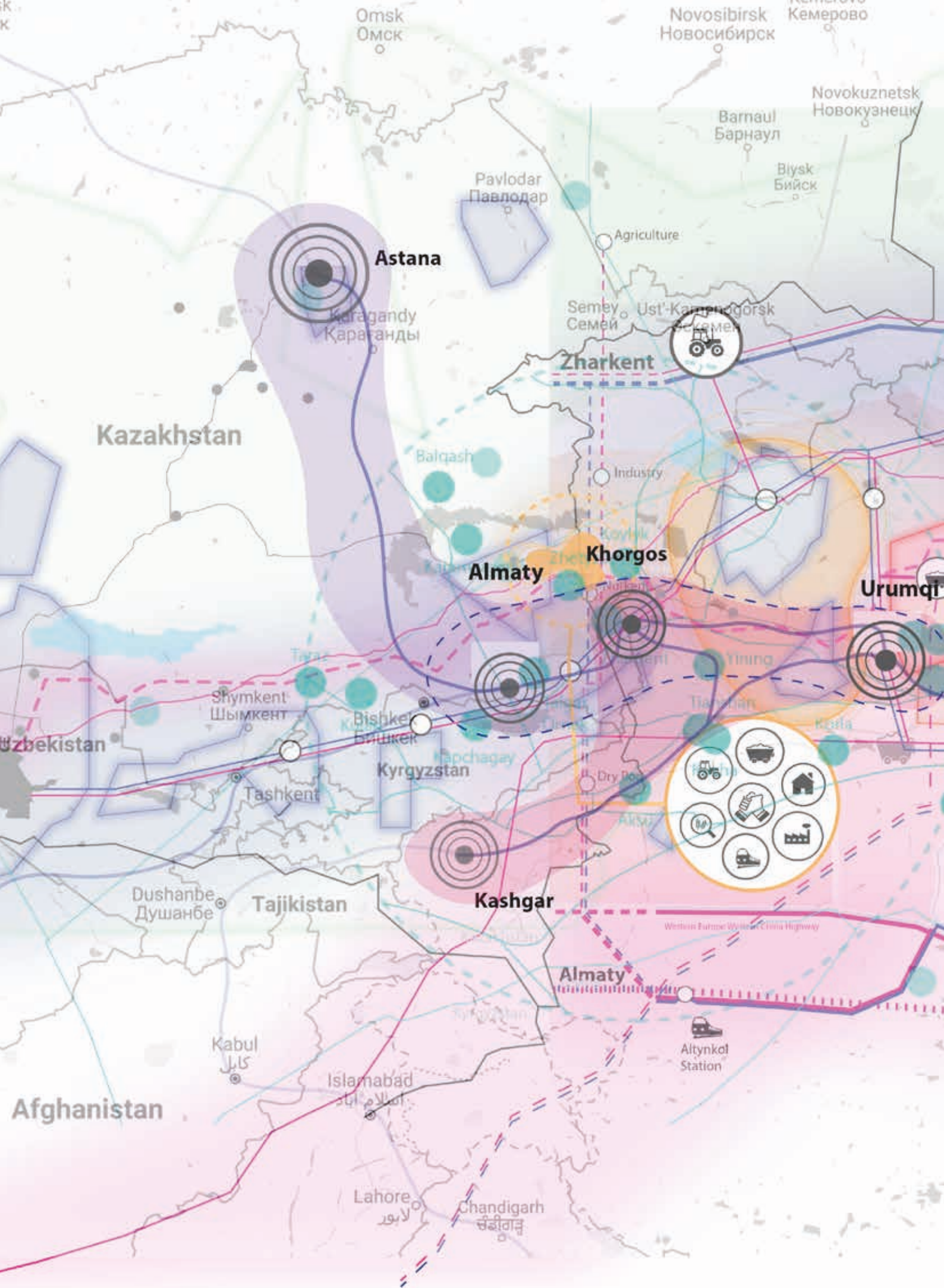
Synthesis findings

Proposed mechanism for global-local interaction in BRI



Analysis of Khorgos Gateway has shown the urgency of engagement as it is emphasised in placemaking practice. For a new development to succeed it needs to connect to all actors and users involved, adding value now and later. By acknowledging and building upon the existing true commitment, true interaction and therefore a true win-win can be achieved. Connecting new developments to the existing ones mindfully, global and local can enter a symbiosis with each other.

Building upon the existing BRI-mechanism new domains addressing socio-spatial development is added. The conducted research and analysis brought forward domains 'culture' and 'urban', but through further research more domains may be added in other cases.





3. Design

Vision | Development goals | Strategies & Implementations | Transferability

Bringing together the analysis and theory findings made me zoom out and rethink the role that the ICBC should play across scales. Therefore this section will start with the definition of design aims inspired by my findings and a vision aimed to address the posed problem. Out of this vision follows a framework of development goals for the ICBC, with strategies and implementations needed to realise them. The strategies and implementations will be presented per goal, and build upon the maps and findings in the previous section.

The integration of implementations will be shown across the three scales used in the analysis section; L, M, S and XL.

Design vision

From findings to vision

Analysis

Local People



Like to build their own housing.



Want a big shopping and entertainment mall like in Almaty



Care for their children to get international education



Want to have more meeting places like park, squares and markets.



Need easier/cheaper ways of travelling in the region as villages and new developments are far away from each other.

Recommendations planning & design

1. Add functions to Khorgos ICBC that will make it an attractive destination for local and regional visitors. For example a shopping and entertainment mall that can compete with the ones in Urumqi and Almaty.

2. Make the Silk Road Heritage visible and accessible.

3. Make the ICBC easy to access for locals and for internationals.

4. Leverage the strength of the border region, to further support the potential of the Khorgos Gateway.

5. Provide reasons and place for interaction in the emerging settlements and new developments.

6. Take local needs and customs in consideration and make space for them.

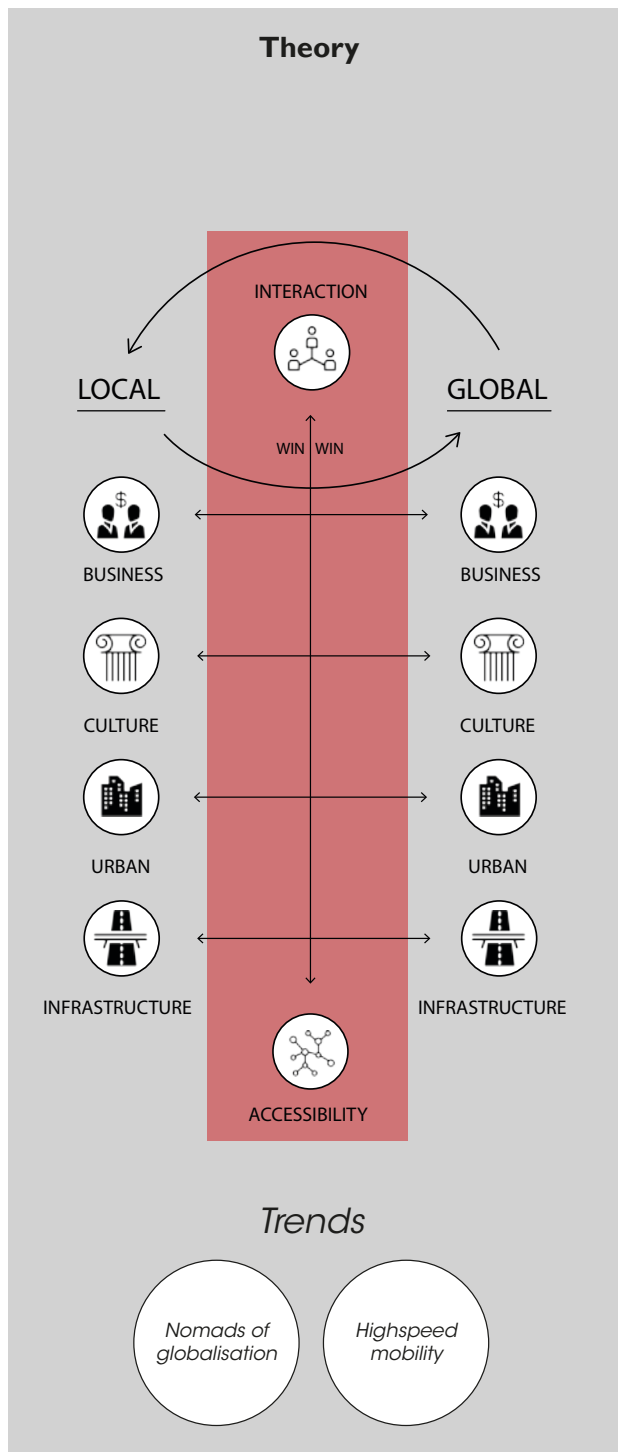
Areas that require attention

*Programme
and
functions*

*Accessibility
and
transportation*

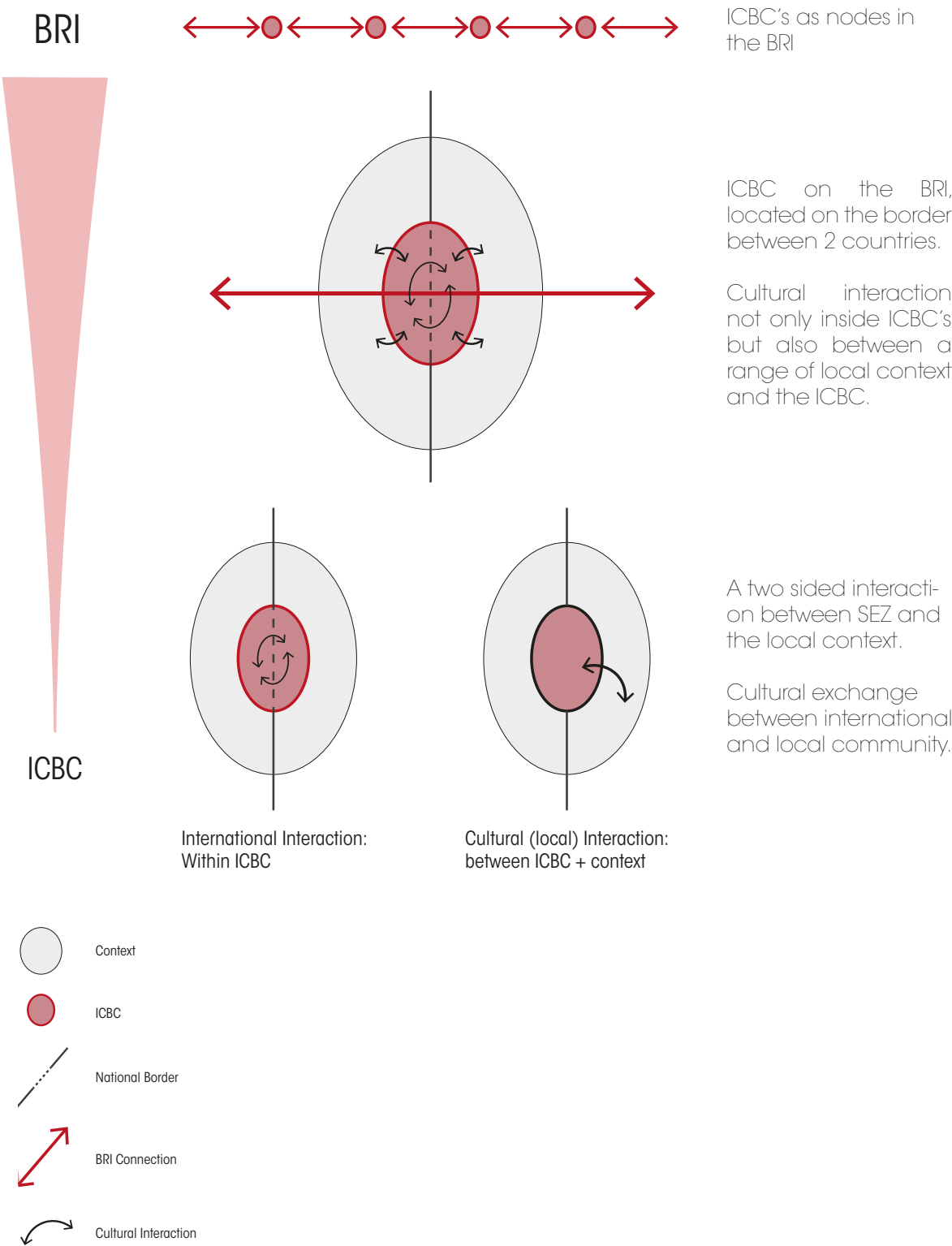
*Local
potential*

Design vision



Analysis and theory findings confirmed the initial hypothesis. Additional domains were added to enrich the existing BRI-development mechanism. However, that alone is not enough. For a win-win to happen, global and local aspects of each domain need to be connected with each other for interaction to happen.

Design vision

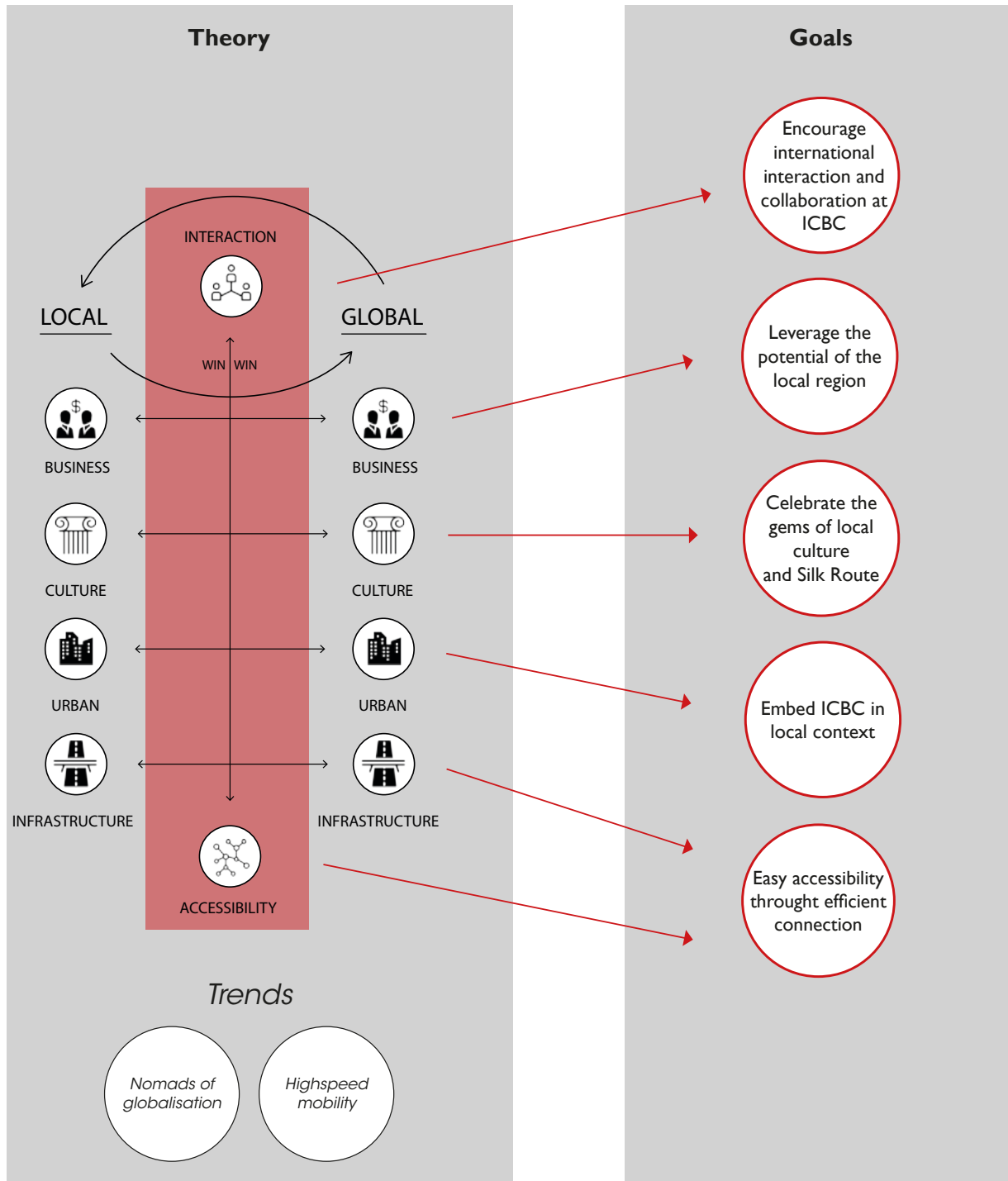


ICBC as the place for global-local interaction

Design aim

- Facilitate interaction between global and local in the domains: business, culture, urbanisation, infrastructure.
- With this the task of the designer is to mediate the global and local interests in the proposed solutions and as such getting investment from both parties and bringing benefit to both parties (them being the BRI investors and developers on the one hand and local government and residents on the other hand).
- Cross border collaboration out of scope of this thesis due to the focus on one side of the border, but will play a big role in further research towards transferring the approach across borders and to other places.

Vision for ICBC Khorgos



Vision for ICBC Khorgos

Development goals

To address the problems identified on site and facilitate interaction between the global and local context for Khorgos Gateway, five development goals were generated using the *local-global domains tool*. These goals are site specific, and therefore may not directly apply to places elsewhere. Below each of the goals is introduced, followed by a comprehensive overview of required strategies and implementations on the following pages.

A. Easy accessibility through efficient connection

The first development goal for Khorgos builds upon the infrastructure driven strategy of BRI. The New Eurasian Landbridge opened up Khorgos for global opportunity, but it is not yet convenient enough to access, six hours away from the nearest airport by car. For the ICBC to reach its full potential as a central meeting point at the border and the greater region, it needs to be easy to access across all scales and for all users. Therefore the transport links should be diverse, frequent and well connected with each other. Khorgos Gateway should be within two hours reach to its closest metropolis Almaty.

B. Leverage the potential of the local region

For interaction to take place, local input is needed as much as the global initiative. Therefore, local strength needs to be actively nourished, so on its own turn it can support the ICBC. While the ICBC brings global knowledge and goods to Khorgos, local expertise can be developed and shared globally through the ICBC, creating a true win-win for global and local communities. The programme of the ICBC and related developments should be tailored by reserving space for development of local core industries of the region.

C. Embed in local context

This goal is to make sure the new developments respect the local spatial context, regardless of the set performance standards. To do so, local landscape as well as local customs of space use need to be considered and integrated with the urgency to densify.

D. Celebrate the gems of local culture and Silk Route

The BRI actively promotes itself as the revival of the Silk Route, however so far this aspect has not manifested itself in the development from a cultural side. At the same time the bigger region with Khorgos at its centre is extremely rich in Silk Route heritage routes and sites. This goal aims at making Khorgos, a strategic meeting spot between East and West into a place for a dialogue between cultures now and then, a point where cultural heritage can be found at and explored from.

E. Encourage international interaction and collaboration at ICBC

The final development goal for Khorgos Gateway covers interaction and collaboration at the fundamental, people-scale. The strategies in this group are aimed at bringing people together through architecture, public spaces, and social activities. At the same time it takes into account the globalisation trend, of more and more migrating people and temporary housing and accommodates space for a new group of users code-named here 'nomads of globalisation'.

Development Goals



Strategy 1

Efficient connection in local region

Implementation 1

Busline Zharkent - Khorgos

Implementation 2

New road connections near the border (see map)

Strategy 2

Polycentric cluster
Khorgos - Almaty - Astana

Implementation 1

Hightspeed connection Astana - Khorgos, with a branch to Almaty

Policy Recommendation

Stimulation and (BRI) investment in infrastructure

Strategy 1

Develop agriculture and farming

Implementation 1

Research and development centre for agriculture near the border

Implementation 2

Space and infrastructure on the SEZ for agriculture business (what transportation modes?)

Policy Recommendation

Tax discount and government support for agri and farming businesses on SEZ

Strategy 1

Expand and densify starting from the existing settlements

Implementation 1

Unit expansion

Implementation 2

Expand and densify Khorgos

Strategy 2

Embed the urban developments with respect to local landscape and uses

Implementation 1

Soften the security barrier of ICBC

Implementation 2

Embed the Khorgos expansion in surrounding context

Planning Recommendation

Expand on existing villages as much as possible

Development Goals

Culture and Society

D
Celebrate the
gems of local
culture
and Silk Route

E
Encourage
international
interaction and
collaboration

Strategy 1

Khorgos Silk Road & Culture
Heritage Hub

Implementation 1

Museum/info/edu centre

Implementation 2

Cross-border hubs
interaction installation

Strategy 2

Connect Khorgos to (Silk
Route) Cultural Heritage Sites

Implementation 1

Provide Silk Route touring
packages to China and
Kazakhstan

Implementation 2

Local village life experience

Strategy 1

Communal living space for
'nomads of globalisation'

Implementation 1

Shared housing facilities,
equal quality for everyone
(hostel/commune village)

Strategy 2

Reasons for interaction
between locals and
internationals

Implementation 1

Learn (language, tech, culture)
Eat (cooking classes, shared
meals, restaurants)
Party (festivals, celebrations)

Implementation 2

Add locally desirable
functions: education, free
housing, leisure, quality public
space, shopping

Policy Recommendation

Special residence permit
Pass for free entrance locals



INTERA



ACTION

Design



Strategy 1

Efficient connection in local region

Implementation 1

Busline Zharkent - Khorgos

Implementation 2

New road connections near the border for better access

Strategy 2

Polycentric cluster
Khorgos - Almaty - Astana

Implementation 1

Hightspeed connection Astana - Khorgos, with a branch to Almaty

Policy Recommendation

Stimulation and (BRI) investment in infrastructure

Strategy 1: improve local accessibility

In the existing situation the villages and the BRI developments are scattered far away from each other with the residents being completely dependent on cars. Especially in case of the ICBC, poor accessibility is a big barrier that prevents from reaching the full potential of functioning of the object.

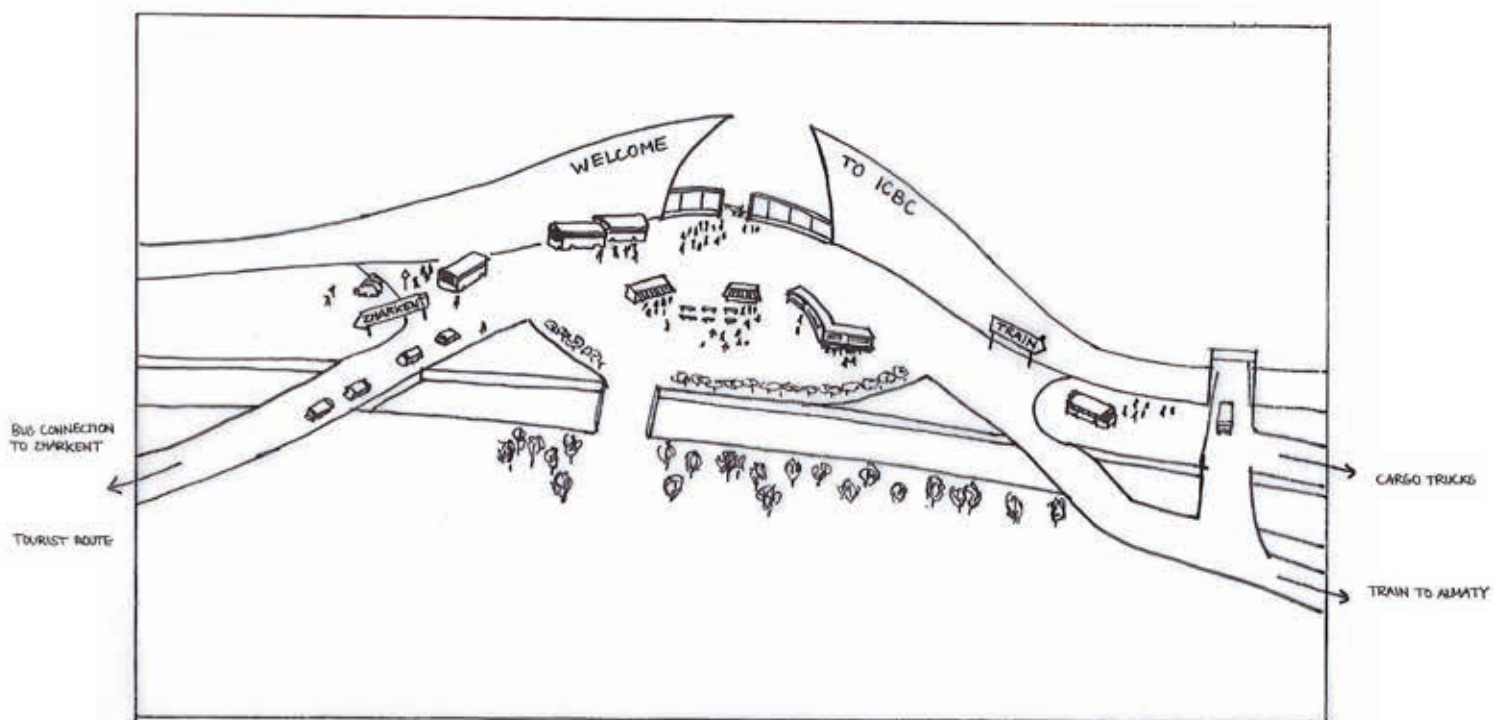
Therefore the implementations of the first strategy include two buslines for residents of Zharkent, Nurkent and the surrounding villages to ICBC and trainstation, as well as redesign of access routes and access points towards to enter the ICBC itself.

Strategy 2: forming a for polycentric cluster

On the regional and transnational scale the accessibility of Khorgos is an issue as well. The nearest airport is six hours away by car. The analysis showed that connections between Khorgos and surrounding megapolises already started forming.

With a high-speed railway connection and development zones the design builds upon this tendency creating a tandem of two clusters: *Astana - Almaty - Khorgos* and *Kashgar - Urumqi - Khorgos*. Khorgos Gateway is already a pivot point between Urumqi and Almaty but cannot compete with the cities. The two clusters will benefit each other through smoother and more active exchange and function as engines of their respective regions.

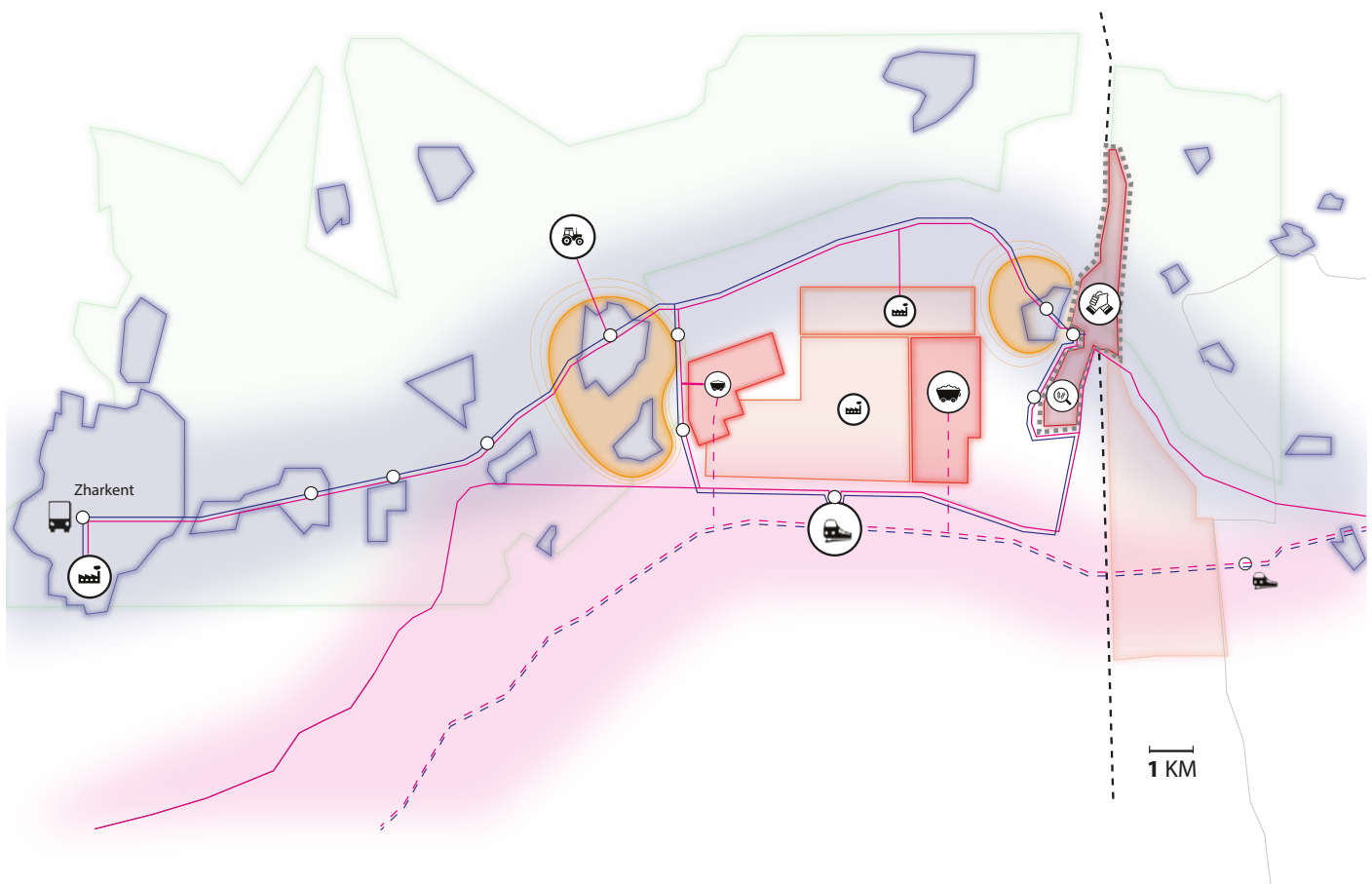
Design



Border cooperation centre is now easy to reach by train and bus.
Freight and tourist routes are conveniently separated to reduce overloaded roads.

Design

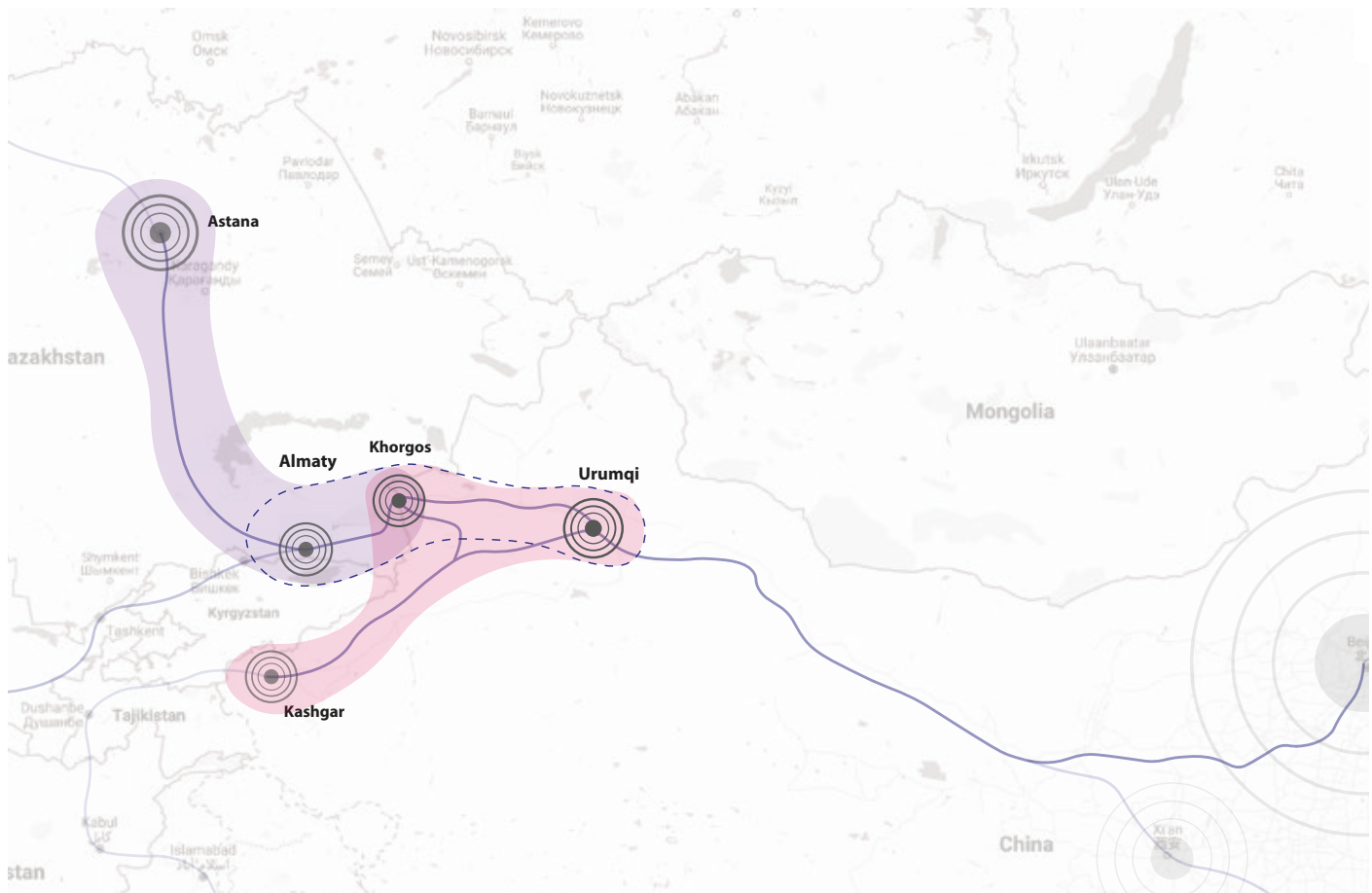
Strategy 1 - Efficient connection in local region







- Collaboration
- National Border
- Soft Border
- Public Transportation Route
- Freight Transportation Route
- Train Station
- Local Cities + Villages
- Agriculture
- Agriculture Research
- Industrial Zone (IZ)
- IZ: Local Agriculture
- Dry Port
- ICBC
- New Housing Development

The tandem of linear and circular buslines connects Khorgos, to the surrounding (new) settlements and strategic objects like the research center, trainstation, dry-port and industrial area. Existing roads are utilised as much as possible, with few minor adaptations to ensure an undisturbed and efficient access to the ICBC. (see A 1.1 and A 1.2 on following pages)

Strategy 2 - Polycentric cluster

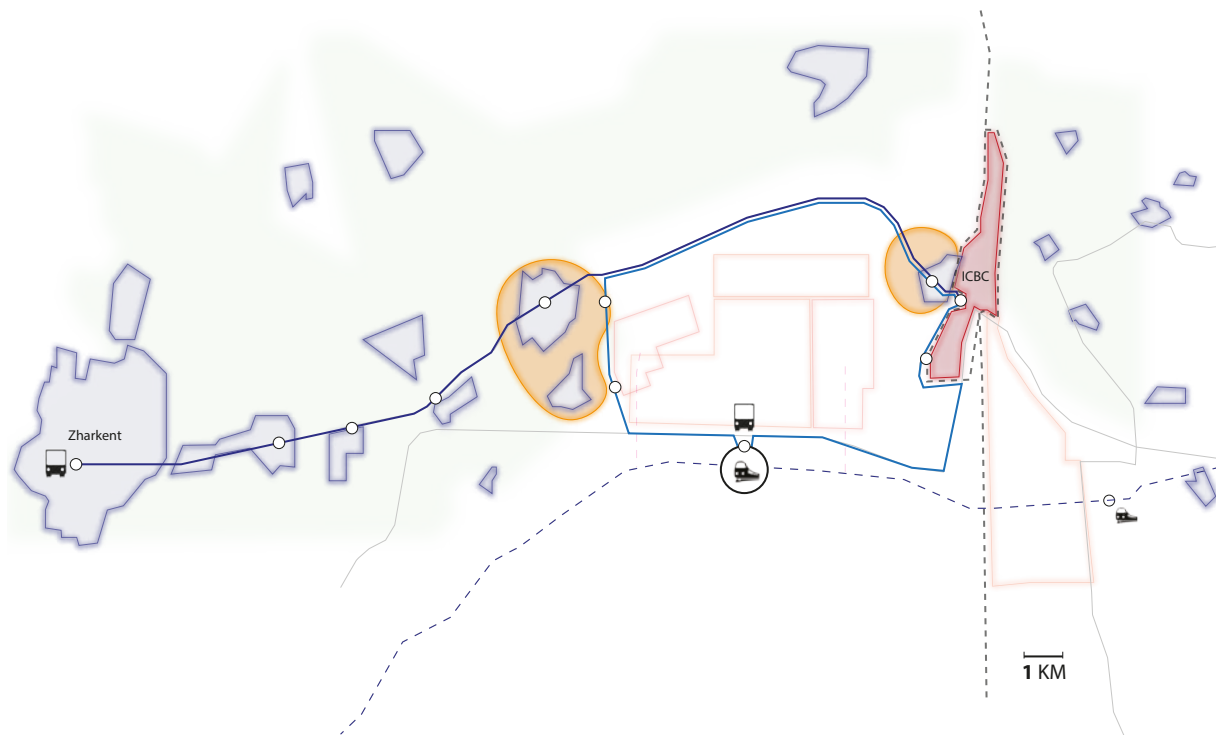


-  BRI City
-  High Speed Railway
-  Collaboration Cluster
-  Development Zone

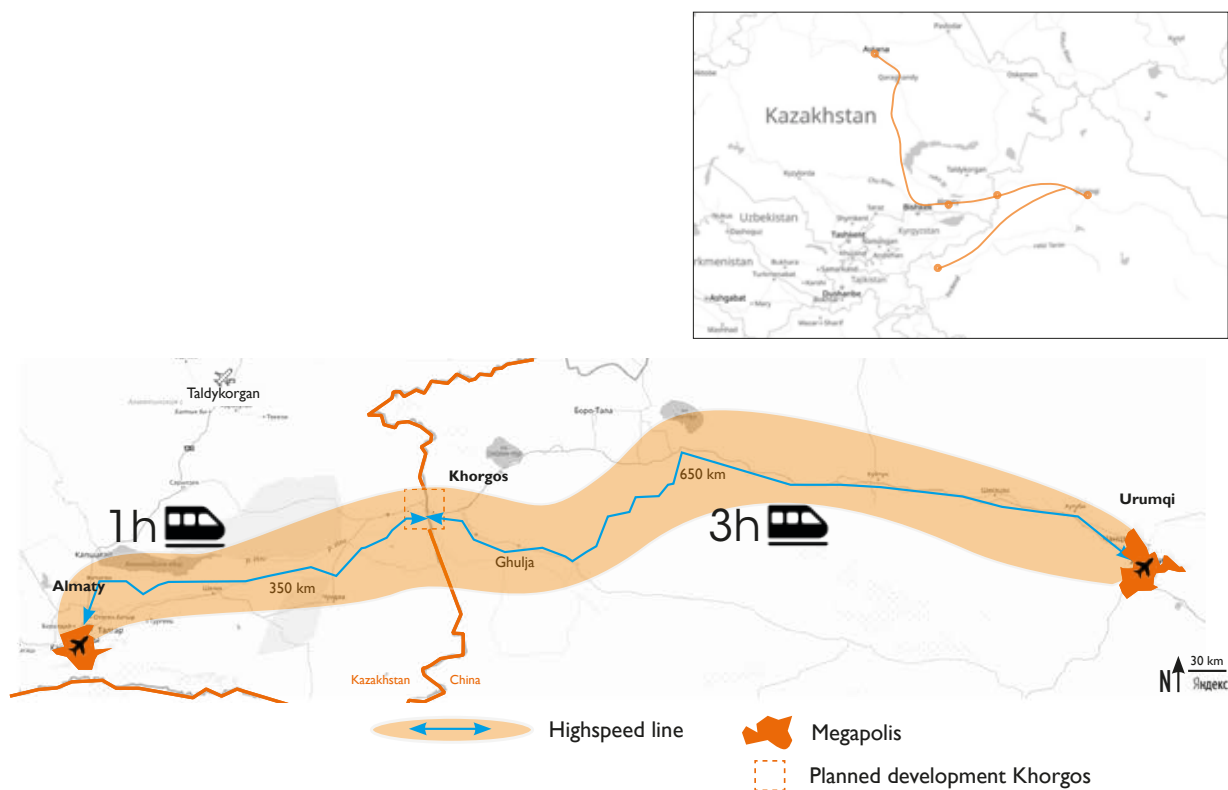
Through highspeed railway, Khorghos is now just 1 hour away from Almaty and 3 hours away from Urumqi. Khorghos is easier to reach and can actively support exchange between the two cities and their development. Through active political and economic investment, this link can grow into a vital artery for both borderlands. (see A 2.1 on following pages)

Design

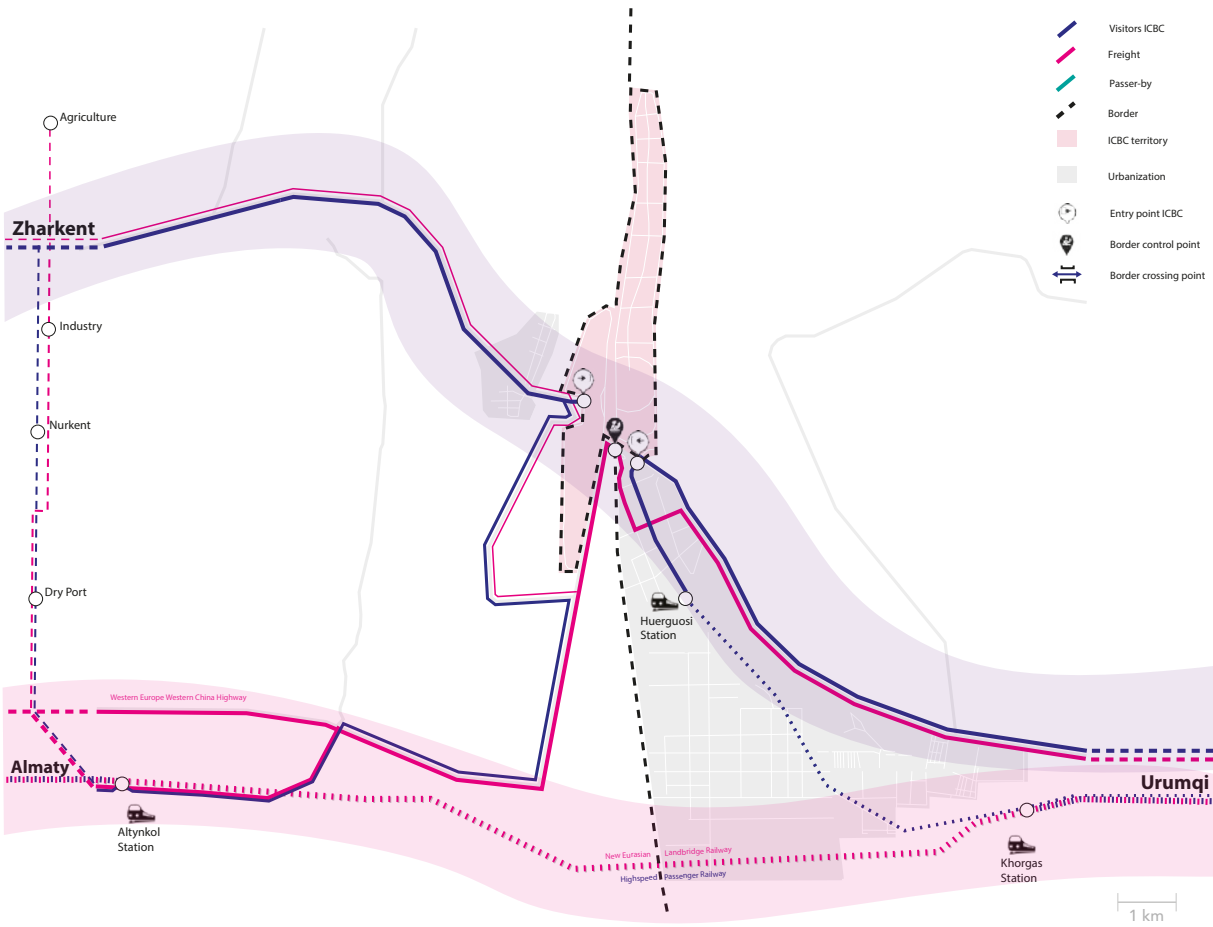
A1.1 Busline



A2.1 Highspeed railway



A1.2 Better access to ICBC



New user routes (existing situation on page 86)



Design



Strategy I

Develop agriculture and farming

Implementation I

Research and development centre for agriculture near the border

Implementation 2

Space and infrastructure on the SEZ for agriculture business

Policy Recommendation

Tax discount and government support for agri and farming businesses on SEZ

Strategy I: invest in agriculture and farming

Analysis showed that Khorgos border region has had a glorious agriculture past and is currently reviving this industry with the boost the new BRI developments are giving to the region. However, the agriculture industry of the region cannot revive on its own. Most importantly education of new people is needed as well as financial support to fully develop.

Therefore, the proposal is to have a agriculture research and development center at the ICBC that will serve multiple purposes: education of new generation farmers, research for innovation of current farming process and research for alternative applications of agriculture like the creation of bio fuel from crops.

Additionally it is important to reserve space for agriculture in the industrial zone (SEZ) and actively promote and support agriculture companies and start ups with subsidies or tax discounts. To promote farming among locals, the local government could provide plots of land for agri-development in a package with housing. Similar mechanism has been applied in Russia to promote spatial development of the far east regions surrounding Vladivostok. Currently each adult citizen of the Russian Federation has right to receive a one hectare plot of land for development purposes. Such initiative would work on many fronts; attracting new inhabitants and supporting spatial and economic development of the region.



Agriculture and development center is a place open for visitors to learn about the industry and developments in Zharkent region.
Reference: Los Olivos Park, US. A small organical farm and education center. Retrieved from: www.losolivospark.com



Research and development centre provides the opportunity for local farmers to exchange with global expert and scientists.
Reference: Indian farmers educated on hydroponics to revitalize dairy sector. Retrieved from: www.jammulinksnews.com

Design

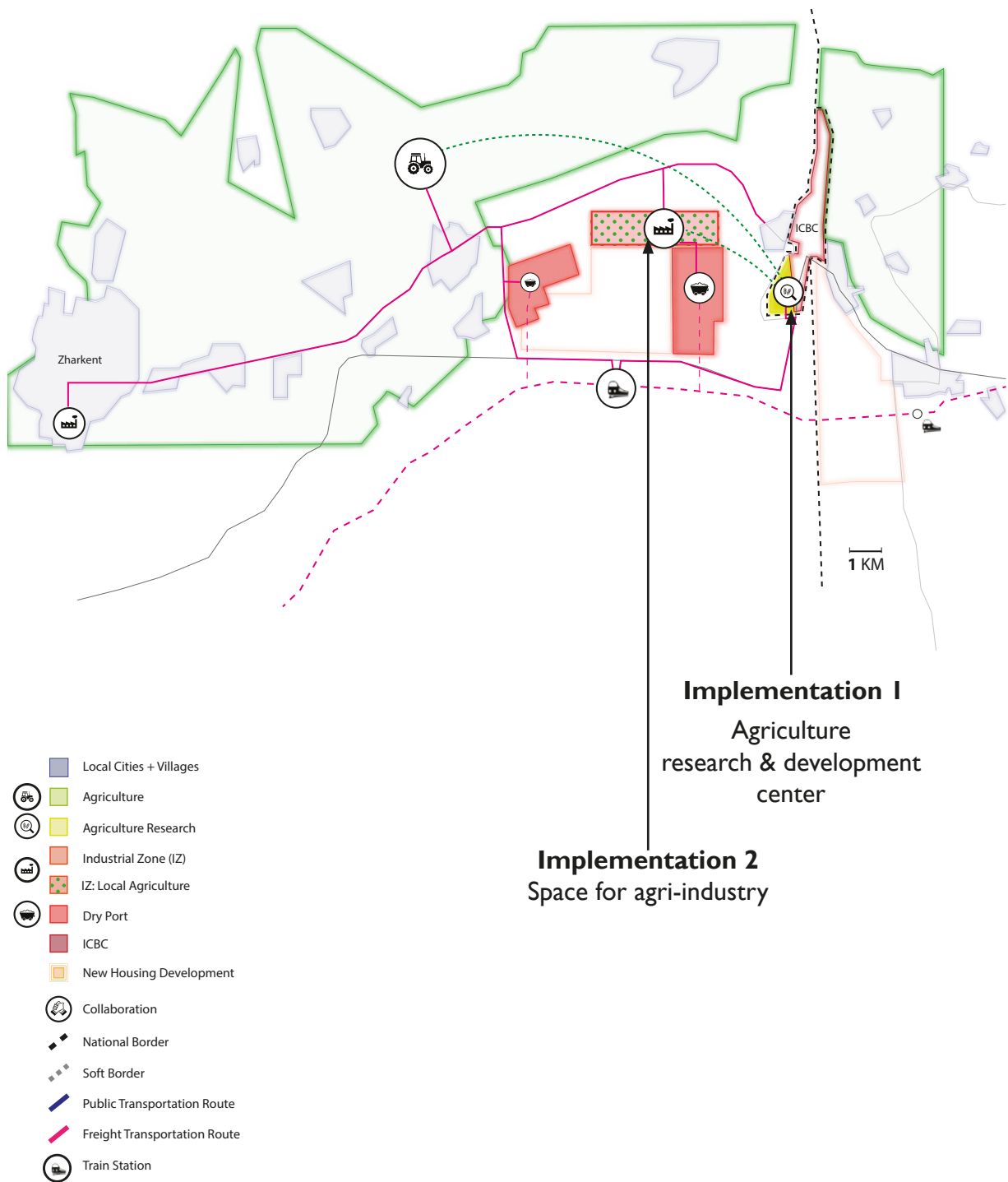


The research and development centre can be constructed in local architectural traditions to represent the region at the ICBC.
Reference: Sala visitor centre for Hua Hin Hills Vineyard in Thailand inspired by Thai traditional architecture. Retrieved from: soh-design.com



Possible directions of agriculture innovation in Khorgos region could be smart and precision farming as well as research on generation of bio-fuels. Reference: Robot for planting seeds. Retrieved from: www.farmmeetstable.com/Pioneering-New-Technology/The-Smart-Farming-Revolution

Strategy 1 - Develop agriculture and farming



Design



Strategy 1

Embed new (urban) developments with respect to local landscape and uses

Implementation 1

Soften the security barrier of ICBC

Implementation 2

Embed the Khorgos expansion in surrounding context

Strategy 2

Expand and densify starting from the existing settlements

Implementation 1

Expansion model of phased units

Implementation 2

Expand and densify Khorgos

Strategy 1: embed new developments

To engage the local context into interaction with the new (global) developments, whatever comes new needs to be weaved into the existing fabric. Goal A covered this aspect through establishing convenient links. The following strategies focus on maintaining a balance with the surrounding landscape and the existing settlements.

The urgency for embedding is clear in case of the ICBC-territory itself. Designed to be a place for collaboration that transcends barriers, this spirit is being heavily undermined by the current barberwire border-separation, no different from any heavily controlled border zone. Using landscape and drawing inspiration from local building forms helps to establish a dialogue.

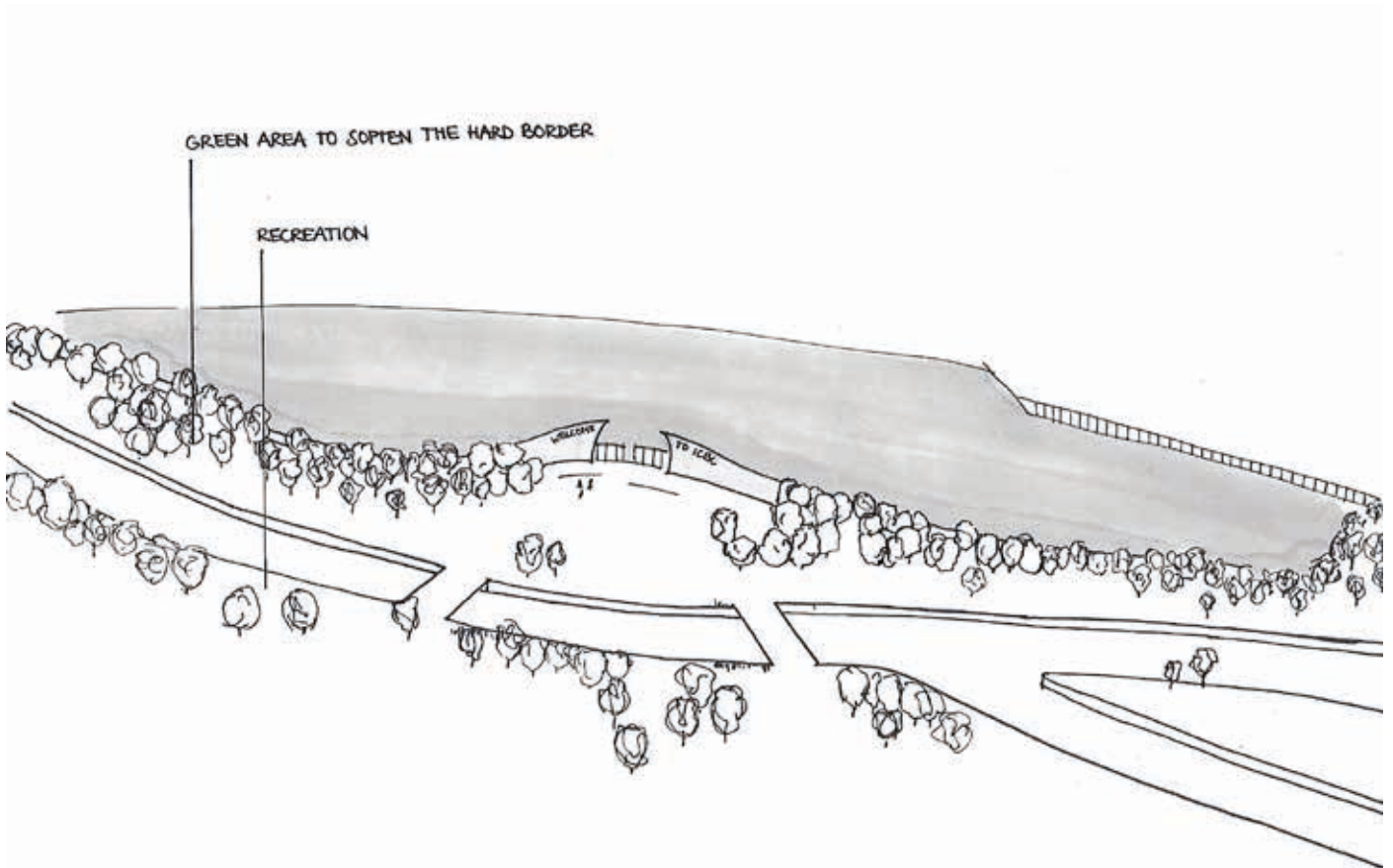
Strategy 2: expand upon the existing

Analysis showed that Nurkent lacks a lively atmosphere and the proper function mix in order to be attractive to locals, regardless the favourable job offers and financed housing. Residents of Nurkent feel social isolation. Zharkent is more cozy and established, and is expanding as well, through making land available for private housing development.

The first strategy recommends to expand as much as possible upon the existing villages. Design for Khorgos shows another example of how to use landscape in densification and expansion of an existing settlement.

For new developments like Nurkent the recommendation is to grow in units. This entails that settlements of the size of Nurkent need to have all basic urban amenities (proper shops, quality public space and more). These settlements can serve as one unit and allow step by step expansion through the years.

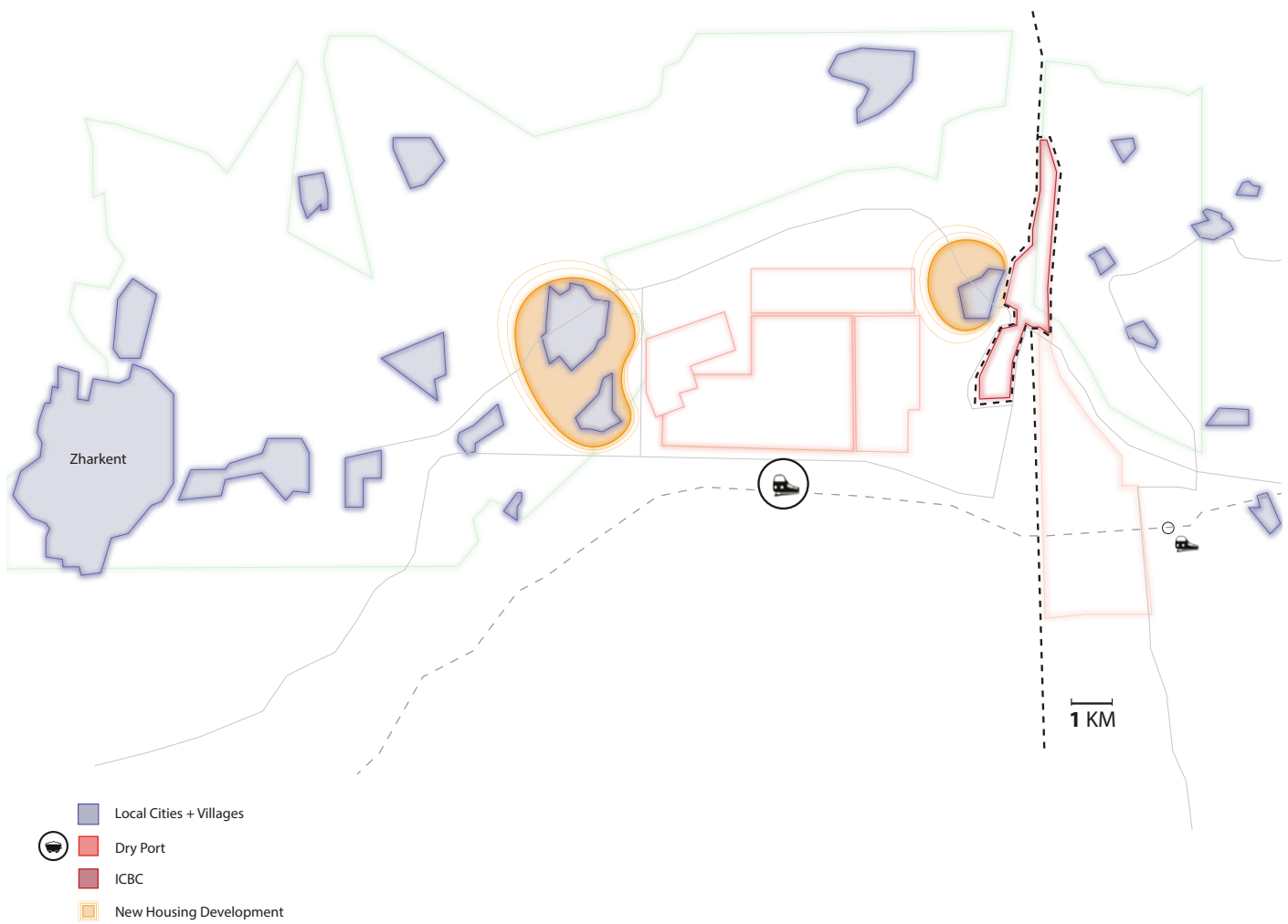
Design



Embedding new developments
into the local spatial context.

Design

Strategy 1 - Expand and densify from existing settlements



Strategy 2 - Embed with respect to landscape and use of space

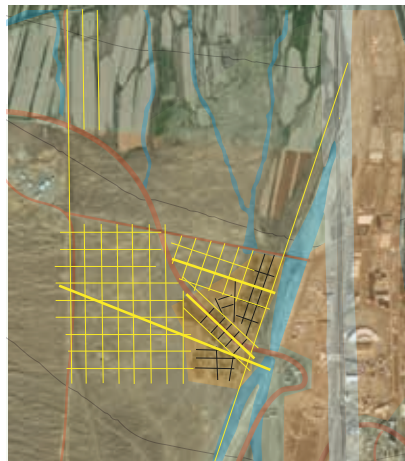
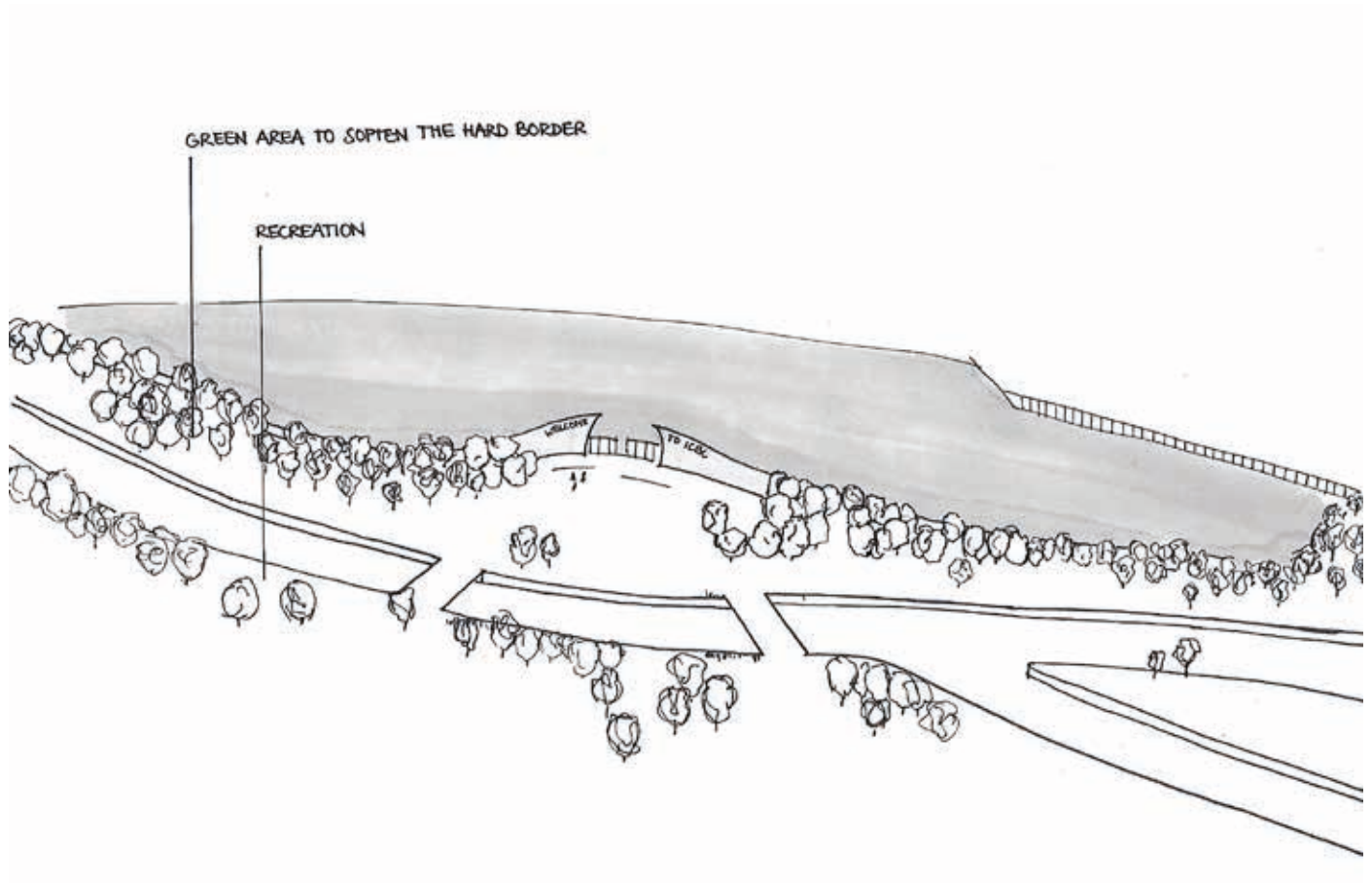


Image sources: Street view Zharkent by author. Yandex satellite view edited by author. Mountains retrieved from: www.myshared.ru/slide/845528/#
River retrieved from: <https://photographers.ua/photo/dolina-reki-horgos-397702>

Khorgos is surrounded by wild nature, wide Kazakh steppe and Tianshan mountains. Near the border meanders the river Khorgos. People in the region prefer to live in self-built houses over apartments, as this allows the freedom of running a household with animals and cultivate own food.

Design

C2.1 *Soften the security barrier*



With modern technology it is already possible to track people crossing the border without the need for a fence. Moreover the terrain contains a river that serves as a natural barrier already. Through landscaping the border of ICBC could be transformed into a more friendly, open and welcoming sight.

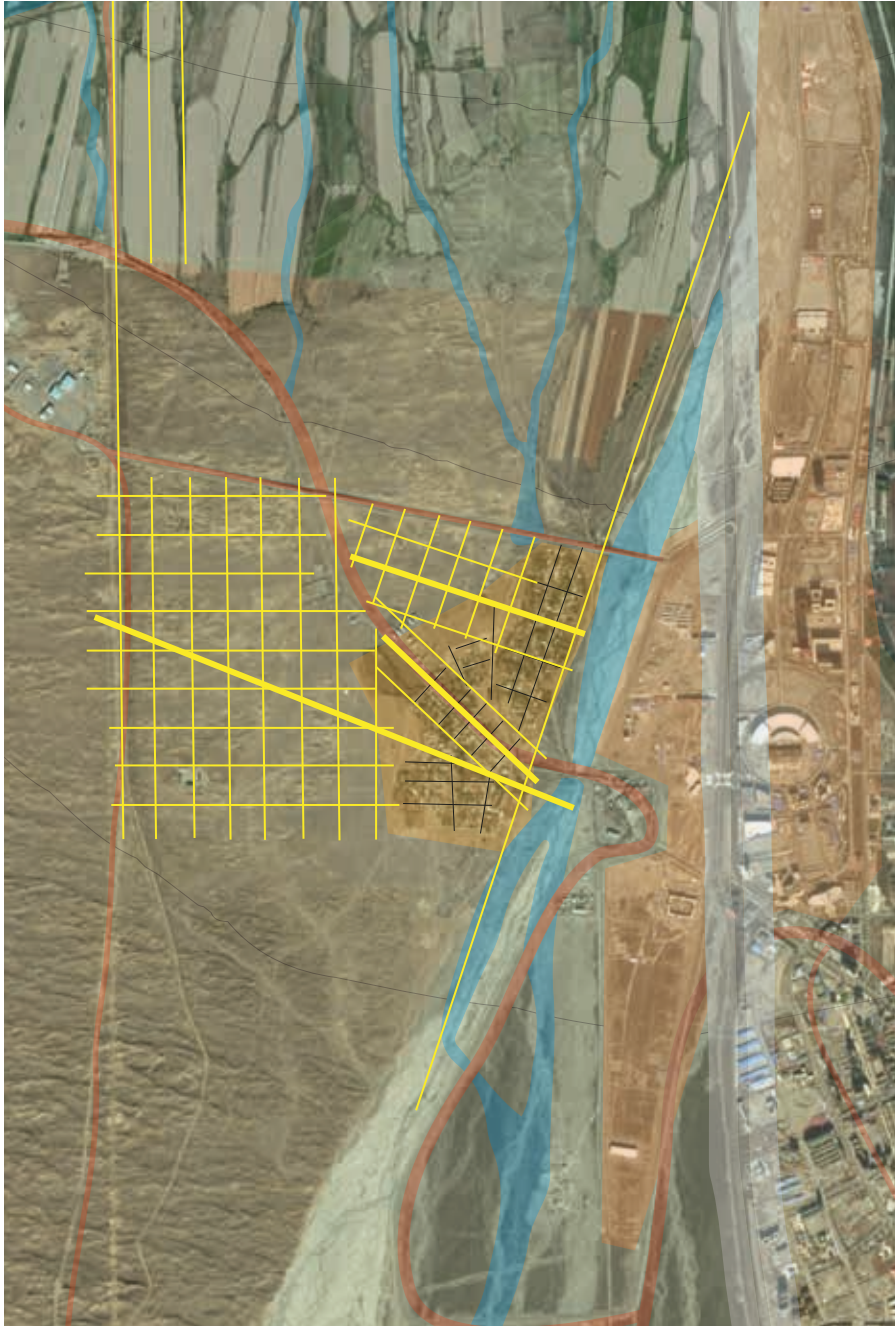


Reference: Design Mexico border by DOMO Architecture.
Retrieved from: <https://www.dezeen.com/2016/12/20/beautifying-border-proposal-domo-architecture-design-replaces-us-mexico-fence-landscaping/>

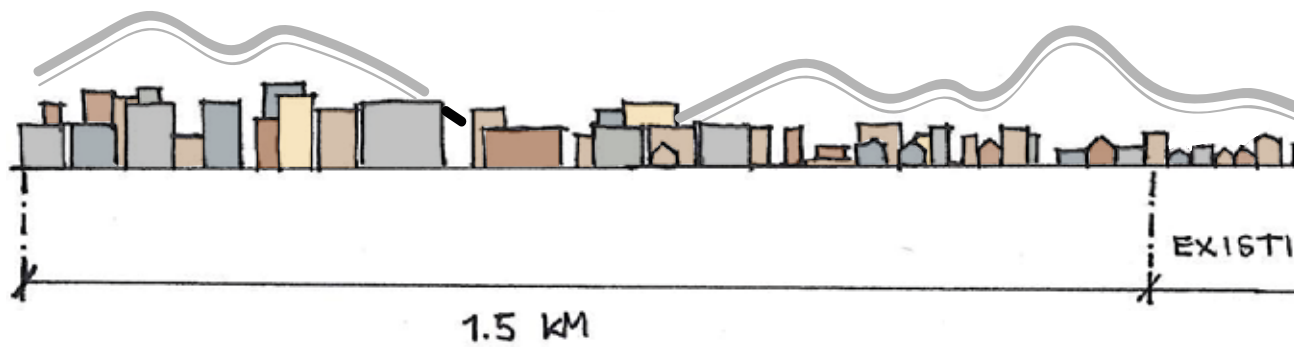
This example show how even a border as controlled and controversial as the Mexico-USA one can be reshaped into an active meeting place while meeting the security requirements.

Design

C 1.2 & C 2.2 Expanding & embedding Khorgos

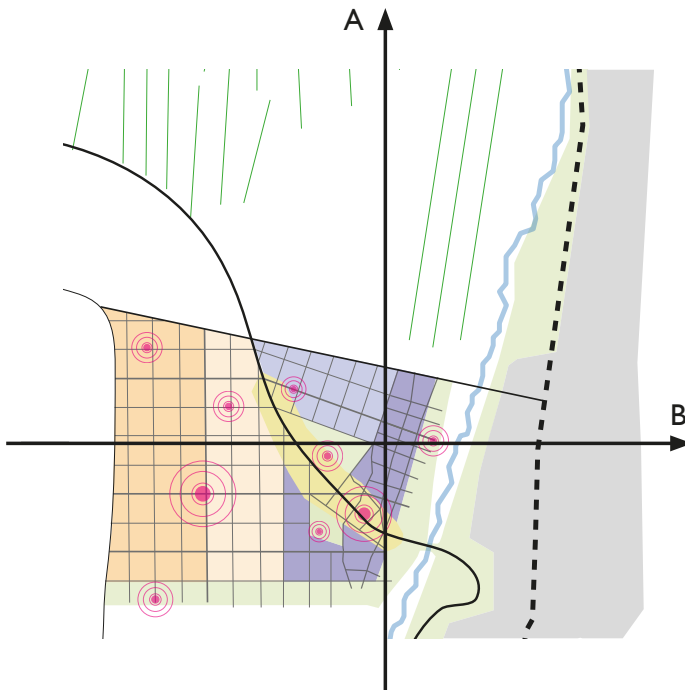
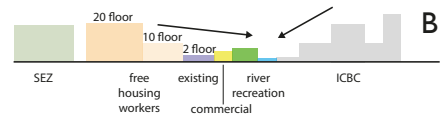


Yandex satellite view edited by author.



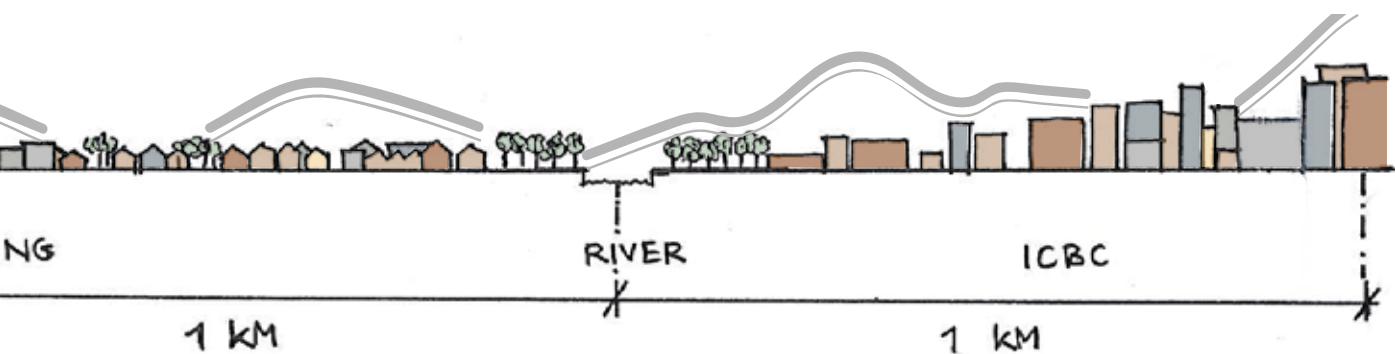
Design

Mountain view



River view

Designing with the surrounding landscape (orientation towards mountains and river) and including zoning that responds to local customs and needs such as making land available for private housing construction and facilitating infrastructure and commercial amenities to do so.



Design



Celebrate the
gems of local
culture
and Silk Route

Strategy 1

Khorgos Silk Road & Culture
Heritage Hub

Implementation 1

Provide Silk Route touring
packages to China and
Kazakhstan

Implementation 2

Local village life experience

Implementation 3

Museum/info/edu centre
regional Silk Route Heritage

Implementation 4

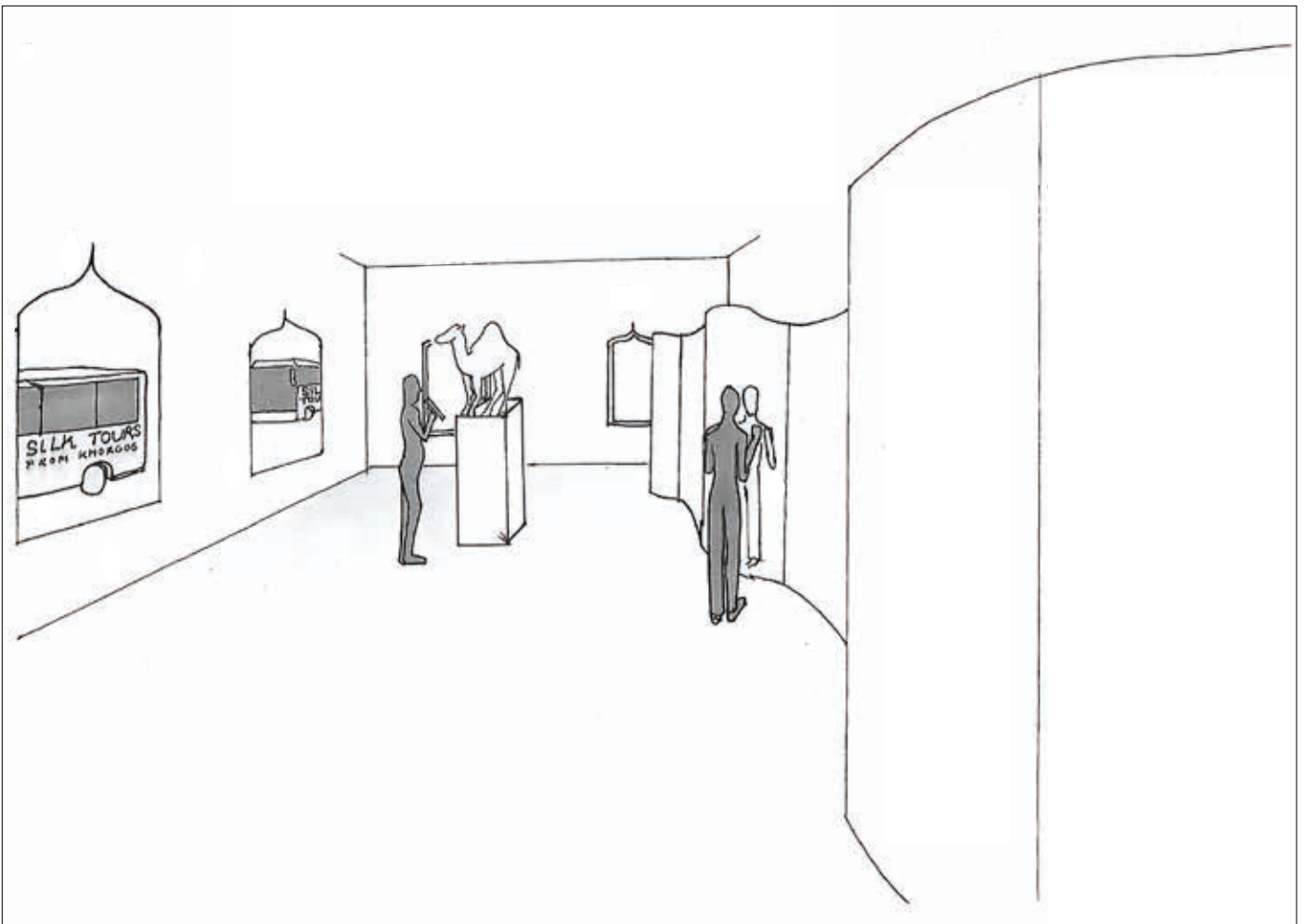
Cross-border hubs
interaction installation

Strategy 1

The BRI has not yet actively addressed the Silk Route legacy the initiative wants to be associated with. At the same time Khorgos is located in the middle of a region rich for Silk Route history and legacy. On top of that both Xinjiang and Kazakhstan have many natural heritage sites. The aim of the first strategy is to make the cultural heritage visible in Khorgos itself through exhibitions. Another goal is to celebrate cultural exchange today (both ancient and contemporary) across the world through the network of ICBC hubs.

Strategy 2

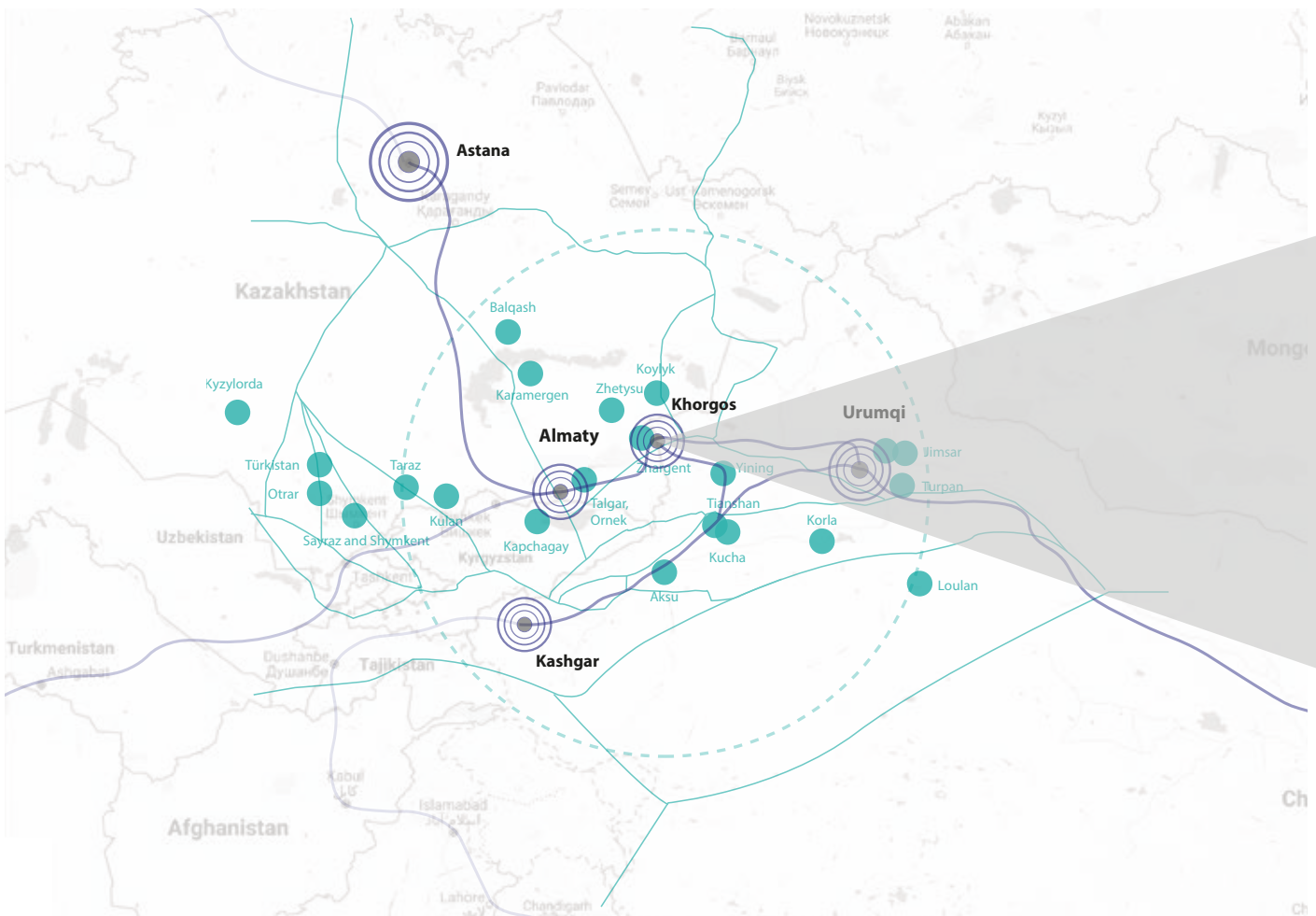
On the other hand, benefitting from Khorgos central position, the aim is to connect the ICBC into the silk route network by making the heritage sites easily accessible (for example with highspeed railway). Programme of ICBC Khorgos will include a tourist centre from which trips can be taken across the heritage sites or in the local region.



Khorgos Gateway as a cultural hub, showcasing the ancient Silk Road Heritage, providing tours to heritage sites and giving the opportunity to have live interaction with people on the other side of the world.

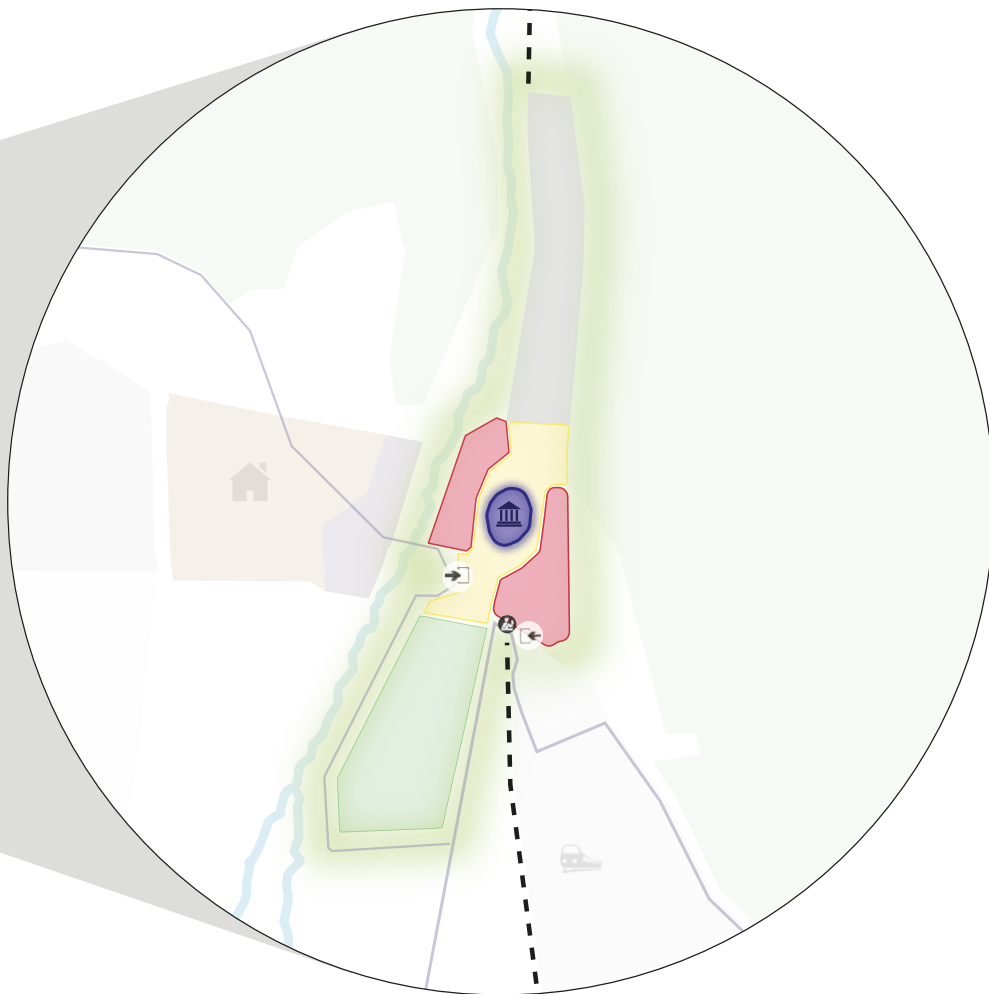
Design

Strategy 2 - Connect Khorgos with the Silk Road network



Khorgos is in an area rich with Silk Road and Natural Heritage Sites. Infrastructure developed by the BRI, and proposed as part of this design, gives opportunities to make this heritage visible and accessible. Utilizing existing connections for public and private transportation, tour routes can be offered from Khorgos to the various sites.

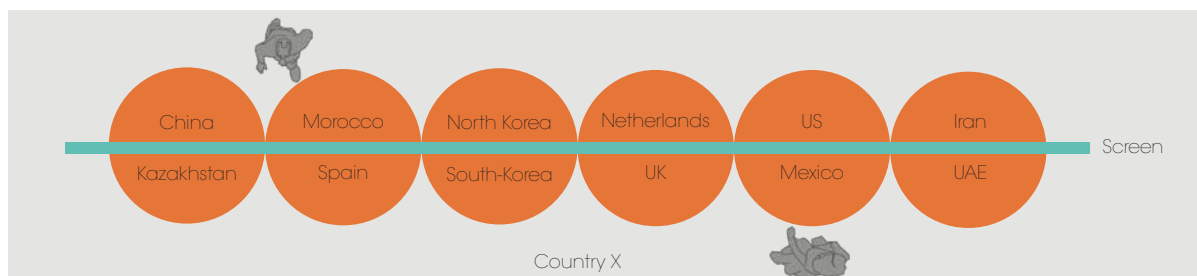
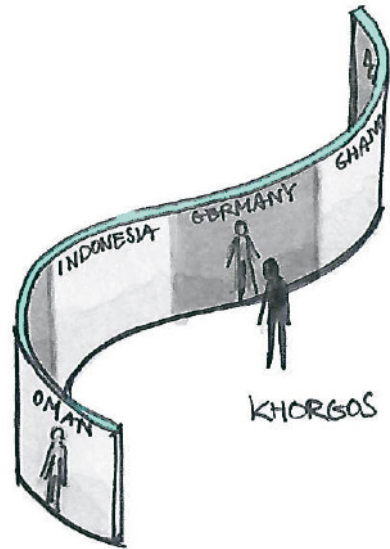
Strategy 1 Khorgos Silk Road Heritage Hub



At the same time, the regional heritage from both sides of the border can be brought together for a showcase at the border cooperation centre. This creates the possibility to get an overview of the regional heritage in one place and have the option to travel to the location to learn and experience more.

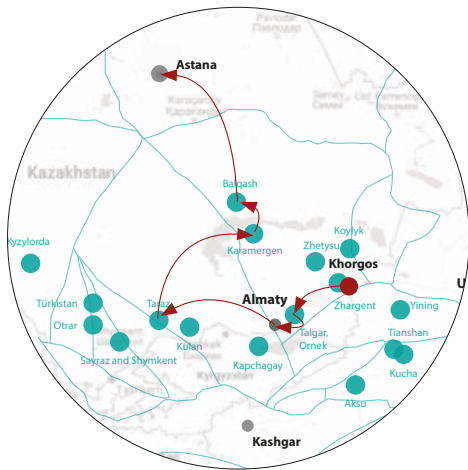
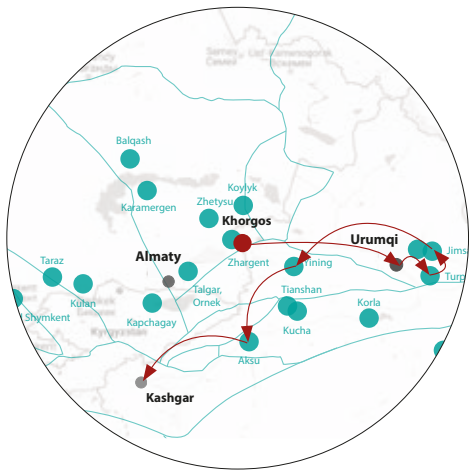
Design

Implementation D 1.2 - Cross-border interaction installation



Based on the scenario where ICBC's will be spread all over the world. An installation of double sided screens (two countries on different sides of one border), that acts like a portal and gives the possibility to observe the people on the other side of the world or even interact with them. A kind of global Skype conversation.

Implementation D 2.1 - Silk Road Tours from Khorgos



The modern musart

a musart route inspired contemporary silk route

CHINA

KHOURGOS - URUMQI - YINING - AKSU - KASHGAR

A 6-DAY TRIP
THROUGH CHINA'S
MOST PRECIOUS
SILK ROUTE GEMS

The modern musart

a musart route inspired contemporary silk route


KAZAKHSTAN

KHOURGOS - KAPSHAGAI - YINING - AKSU - KASHGAR

A 4-DAY TRIP
THROUGH
KAZAKHSTAN'S
MOST PRECIOUS
SILK ROUTE GEMS

See appendix for detailed tour description

Design



Encourage
international
interaction and
collaboration

Strategy 1

Living space for
'nomads of globalisation'

Implementation 1

Co-living facilities, equal
quality for everyone
(hostel/commune village)

Strategy 2

Reasons for interaction
between locals and
internationals

Implementation 1

Learn (language, tech, culture)
Eat (cooking classes, shared
meals, restaurants)
Party (festivals, celebrations)

Implementation 2

Add locally desirable
functions: education, free
housing, leisure, quality public
space, shopping

Policy Recommendation

Special residence permit
Pass for free entrance locals

Strategy 1

More and more people are living on the go and don't live in a fixed place. The special position of the ICBC in between the two borders provides an interesting opportunity and perspective to people that after all travelling do not have a fixed place to call home. The first strategy, therefore, proposes to include co-living housing in the programme of the ICBC and provide special residence status allowing the 'nomads of globalisation' to live between the countries for a while. As such the ICBC network creates a new dimension, in which these 'nomads of globalisation' can move across the world between the boundaries of its rules. The border cooperation center becomes a new neutrality.

Strategy 2

Putting an international community to live in the ICBC is not a guarantee for any interaction between global and local. For people to interact they need to have shared activities, spaces or needs. To facilitate this, the second strategy proposes to include the locally desirable functions (like luxury shopping and entertainment mall) into the ICBC and organise festivities and other social activities where the locals and the internationals could casually interact. For this to happen the entry to the ICBC should be easy and free of charge.

Design



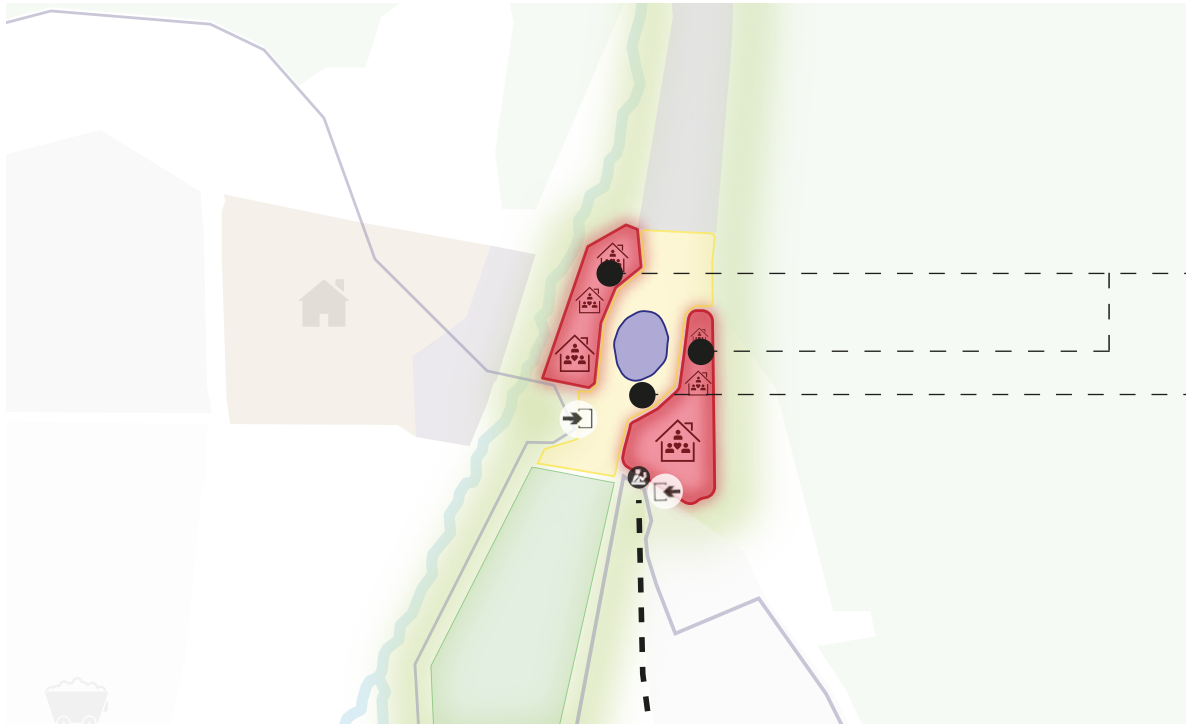
ICBC commune living for all visitors regardless their status. Reference project: winning project of 'Reside: Mumbai Mixed Housing', a proposal for multicultural communal living urban development. Retrieved from: www.archdaily.com/895770/winners-of-reside-mumbai-mixed-housing-announced



Enclosed, human scale public spaces with architecture reflecting the local context, represent the spirit of the place ICBC is meant to become. Reference source idem. to the image above

Design

Strategy 1 - Communal living space at ICBC



The opportunity to travel all across
the globe between the boundaries,
as a neutral observer

Design

Strategy 2 - Reasons for interaction between locals and internationals



Eat & Cook



Learn



Celebrate

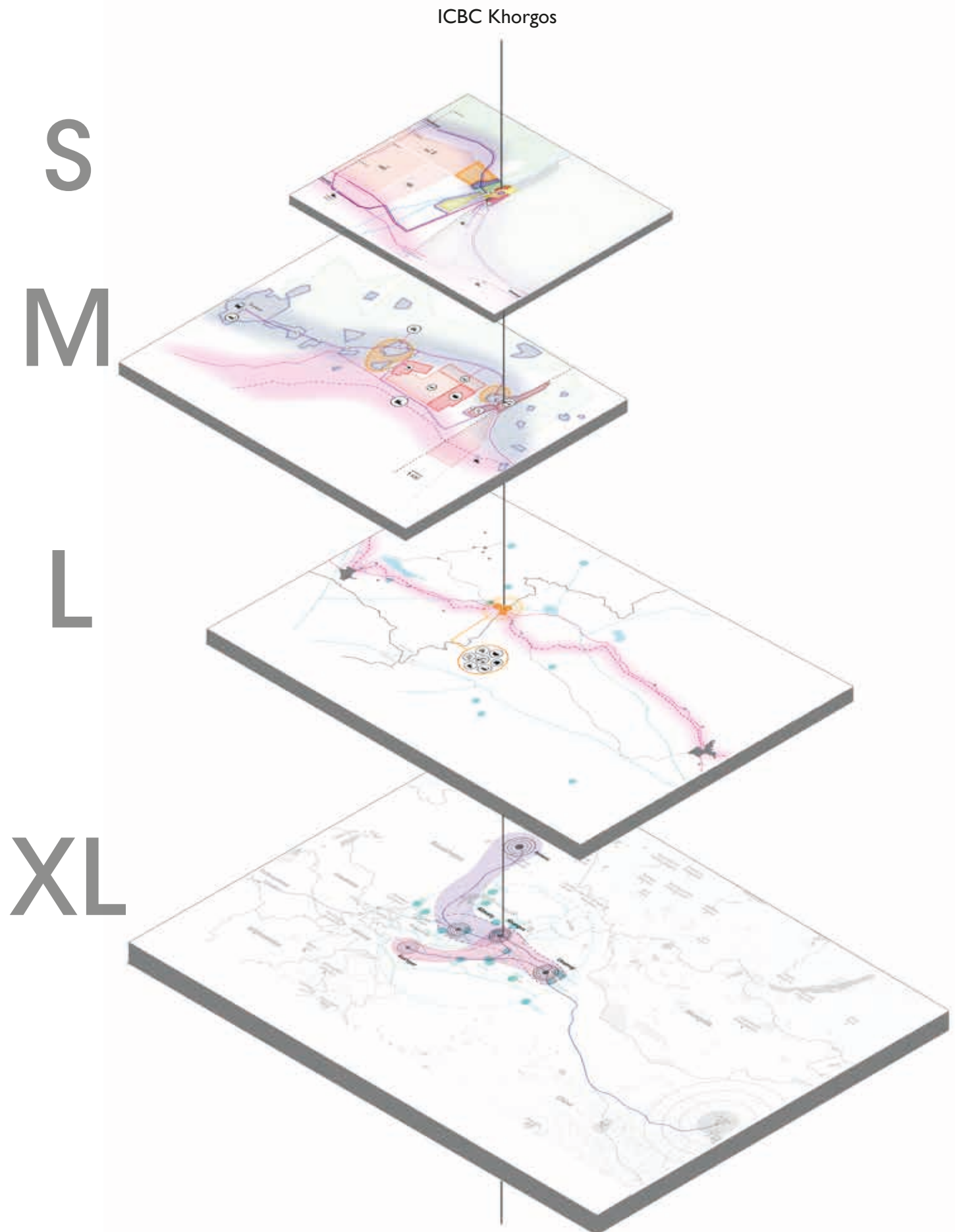


Co-living building typology that combines different activities and user groups. Source: <https://www.dezeen.com/2017/11/23/mini-co-living-destination-shanghai-china-industrial-architecture-residential/>

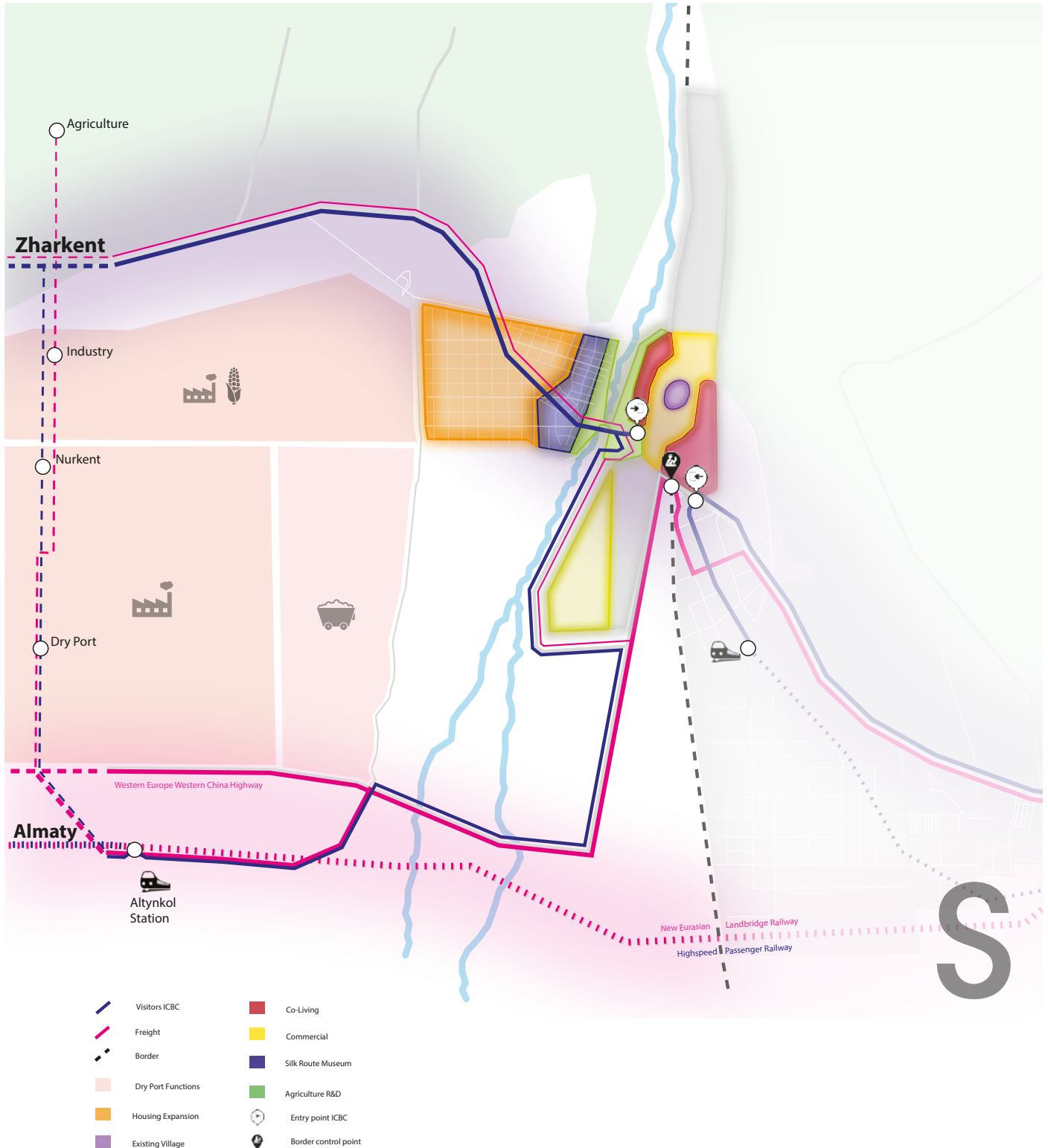


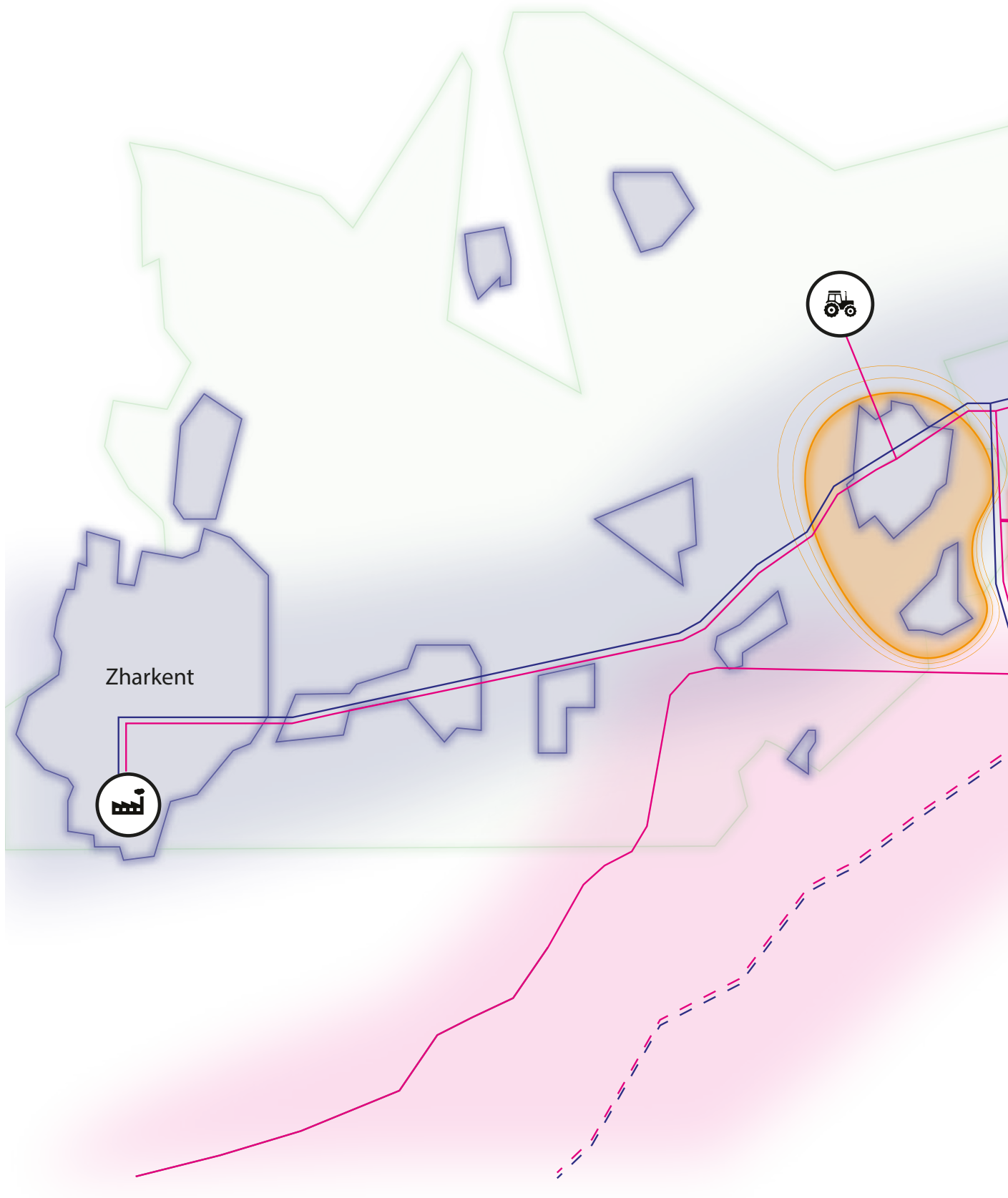
Mixed Residence

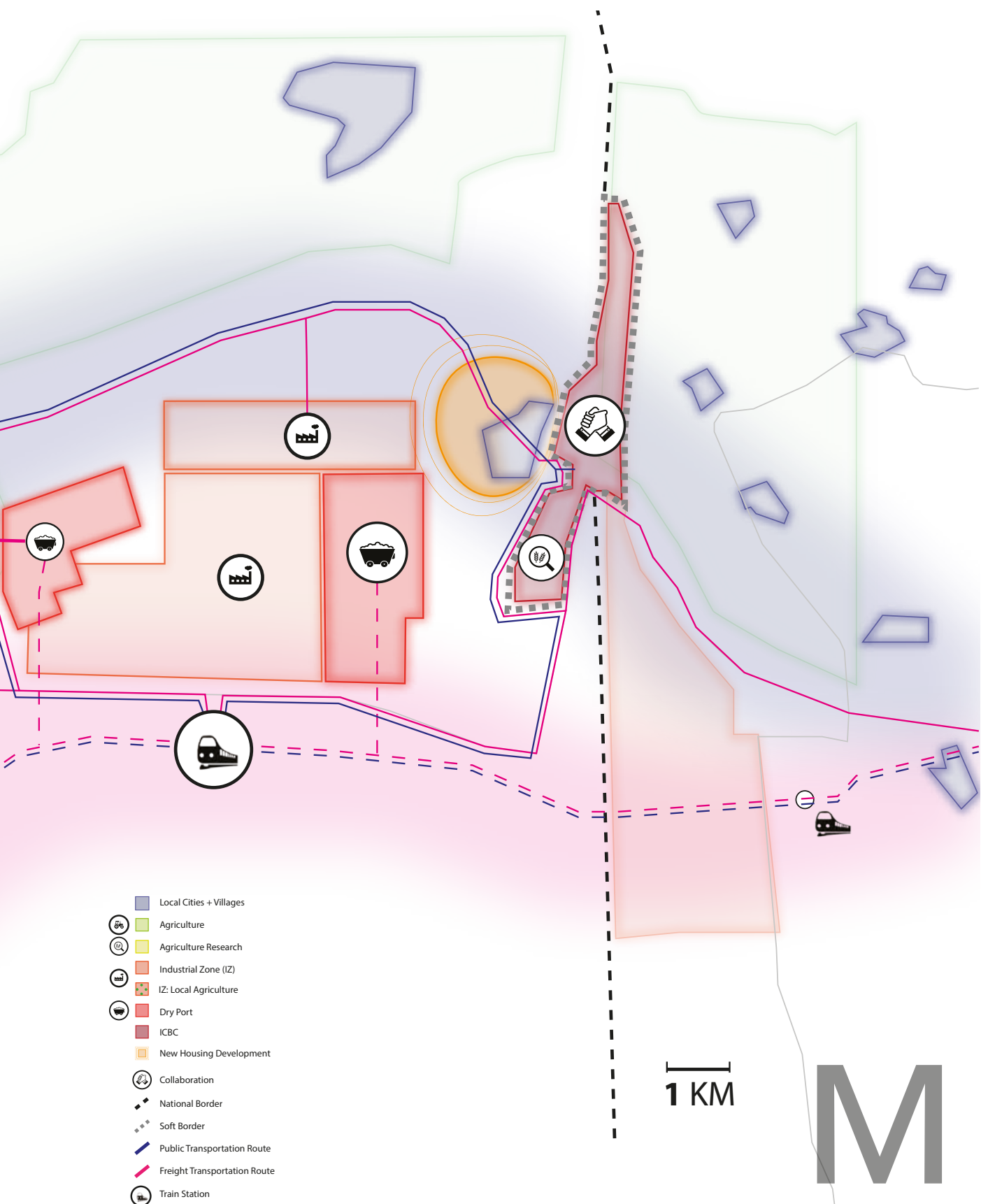
Integration design

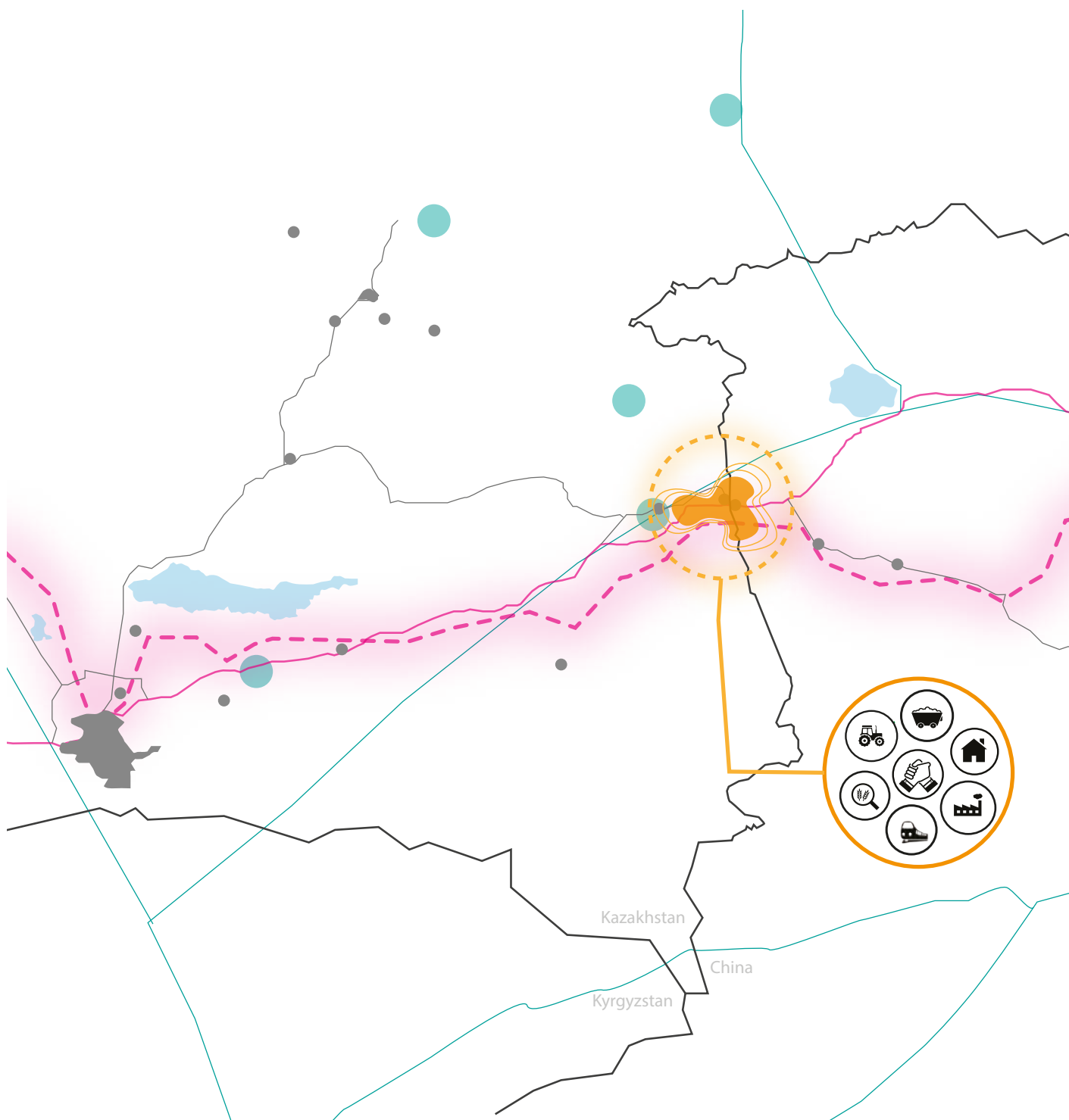




Integration design

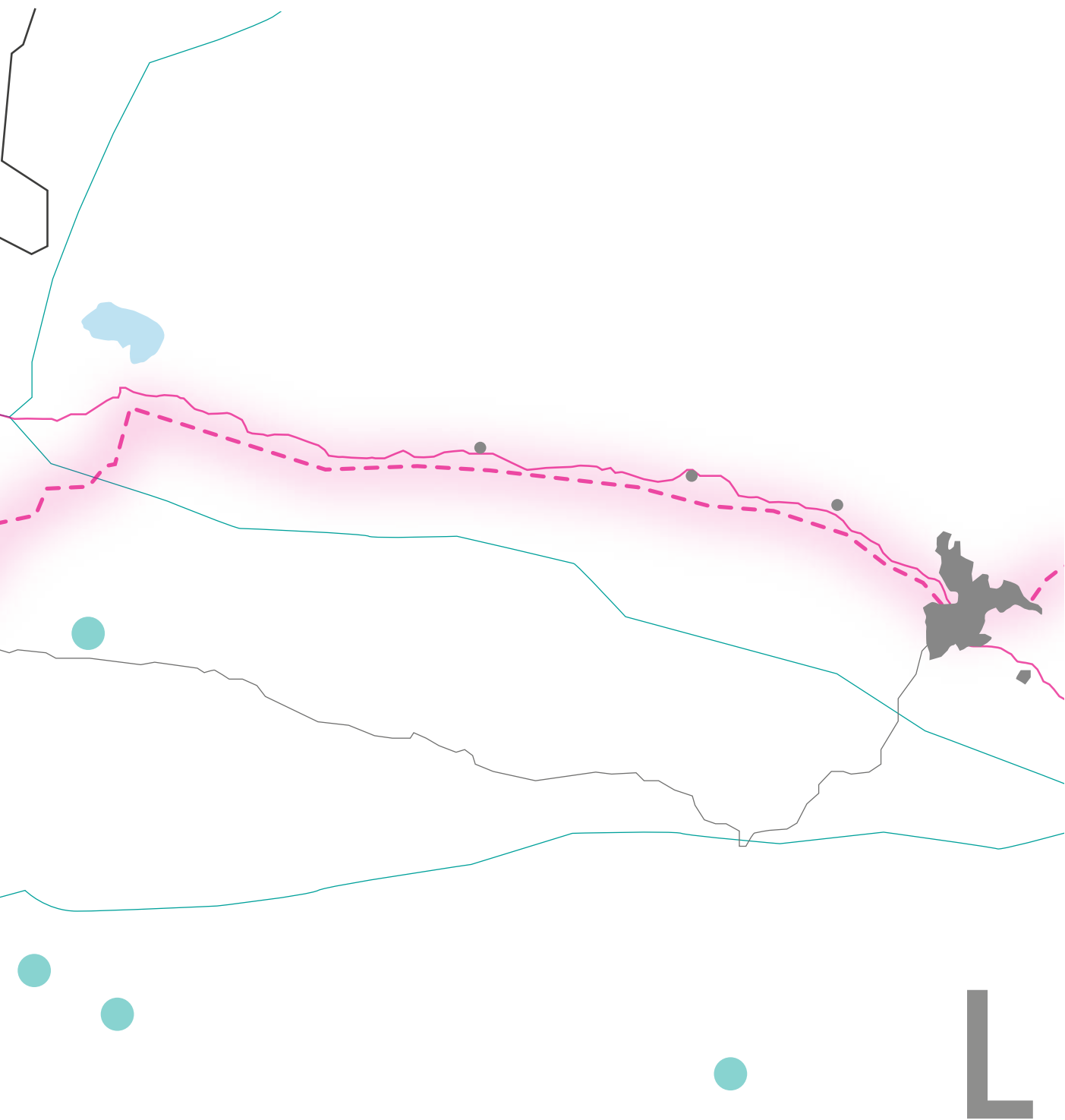


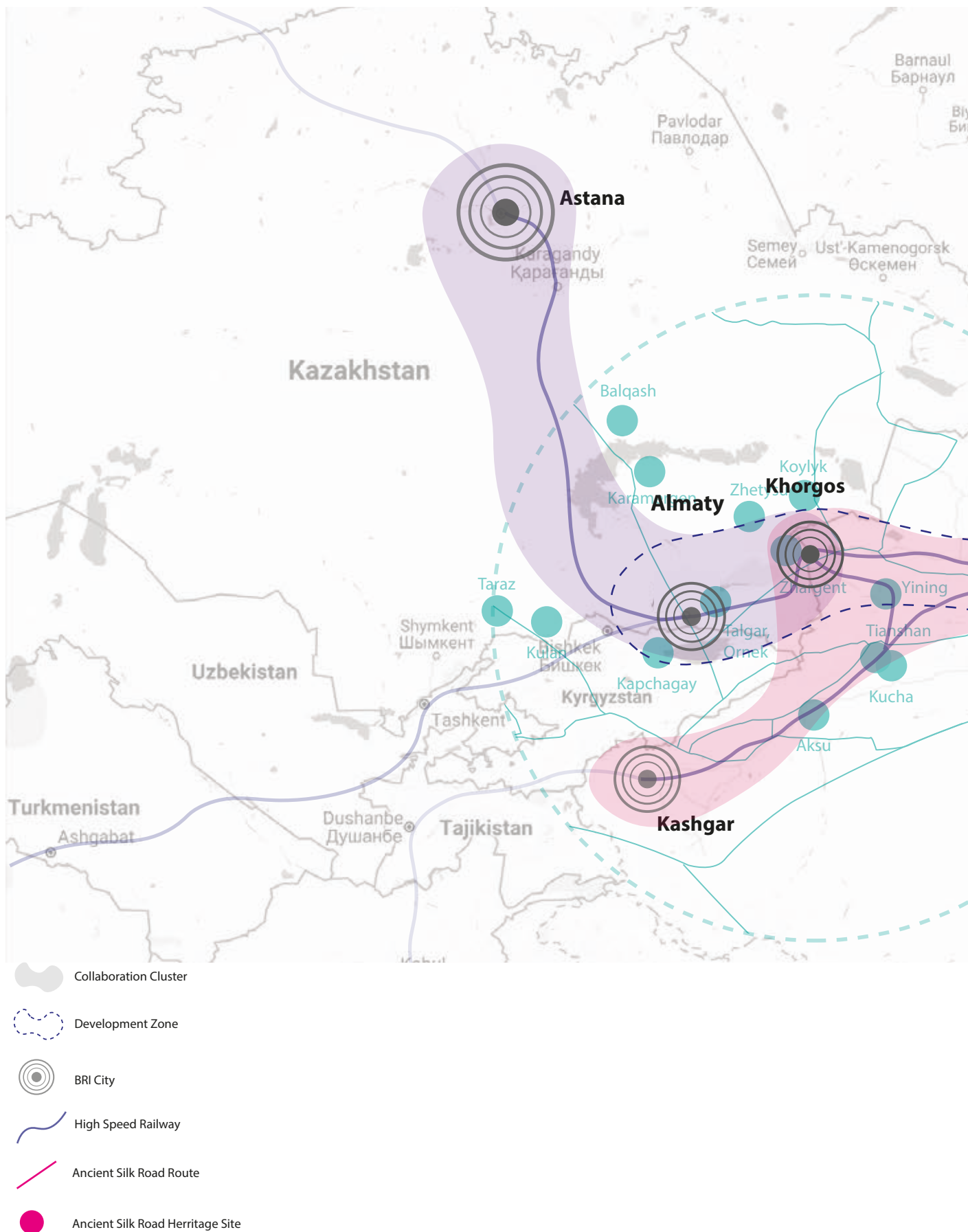


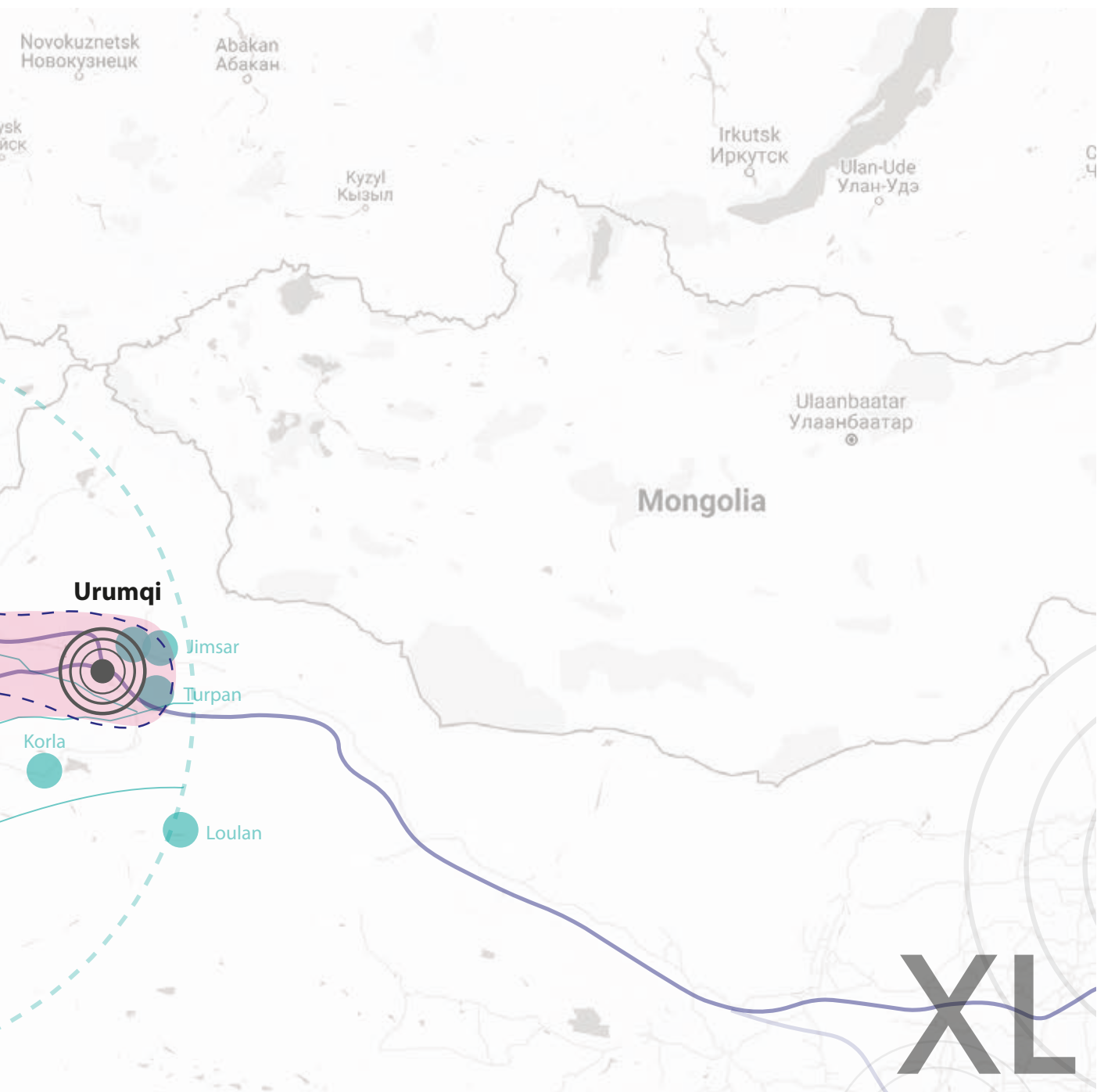




-  highspeed railway connection along the New Eurasian Landbridge
-  BRI developed West Europe West China Highway.







ICBC - a place for interaction



Commune living



ICBC - a place for interaction



Trade & Leisure



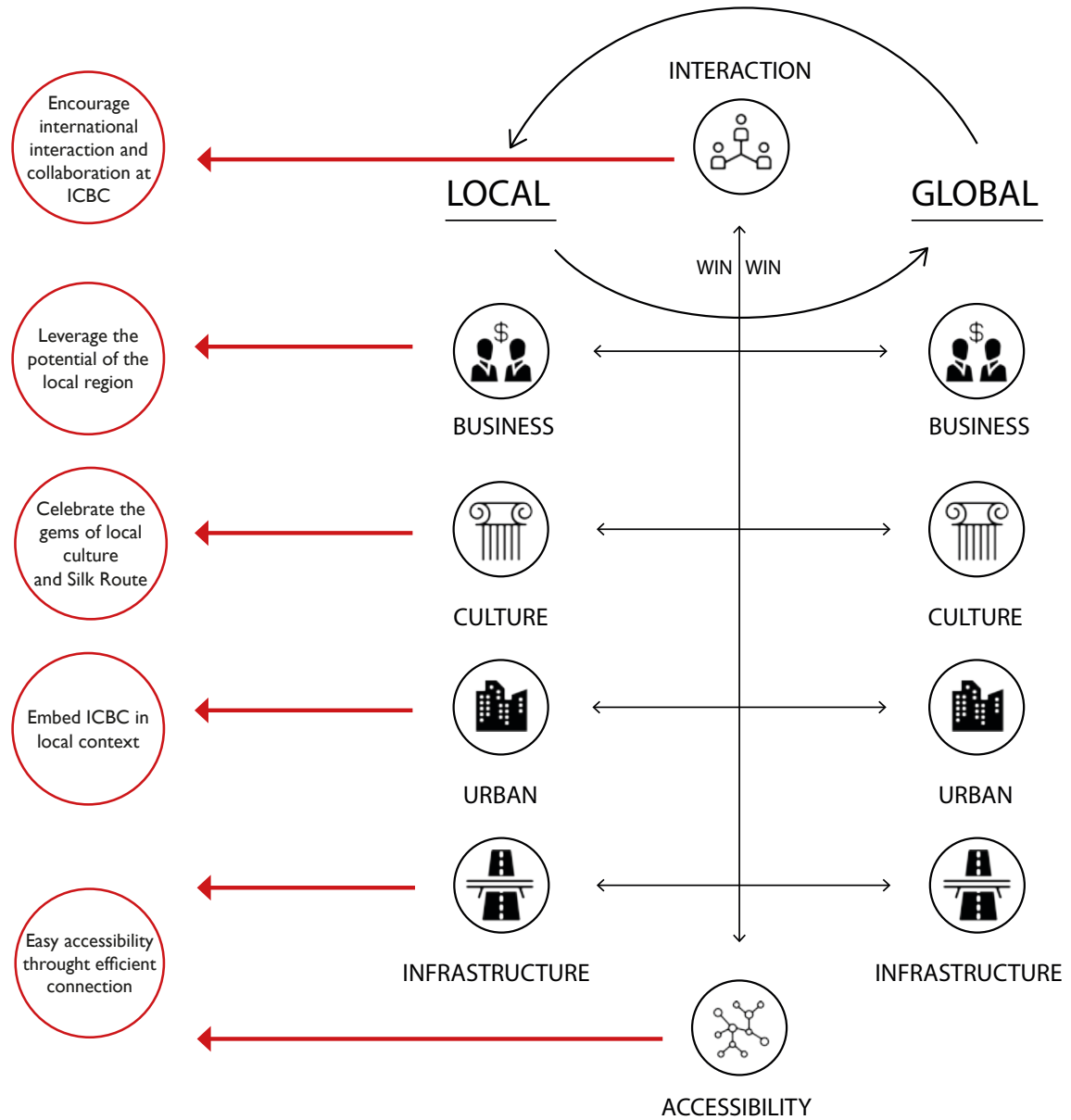
ICBC - a place for interaction



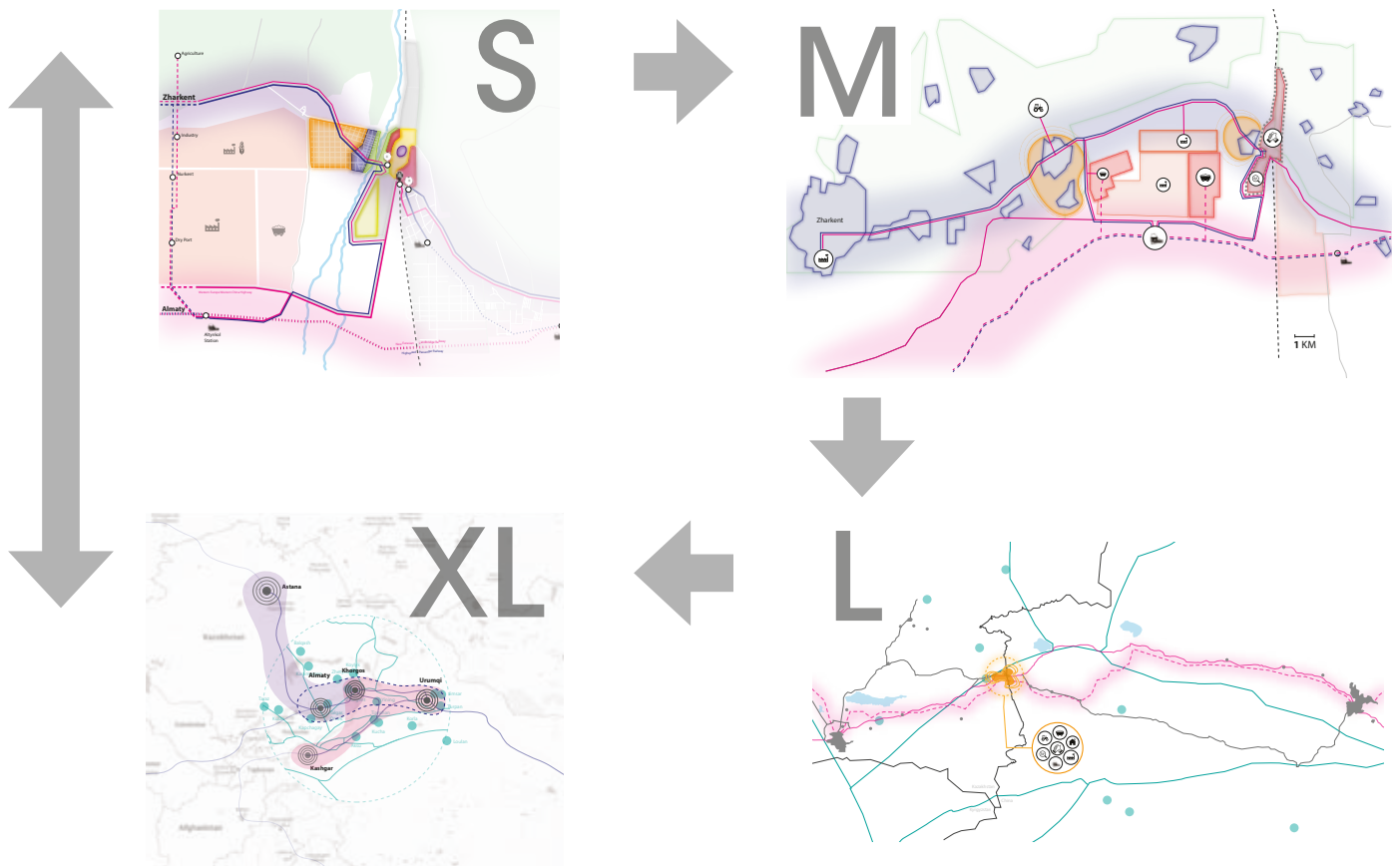
Culture Exchange



Summary design



Summary design



Using the evaluation and assessment framework five development goals were generated for ICBC Khorgos. These goals were translated into strategies and design implementations across scales. On the smallest scale, ICBC serves as a meeting place for locals and internationals a hub for knowledge exchange. On the global scale, ICBC with its surrounding region becomes a pivot point in the network of megapolises.



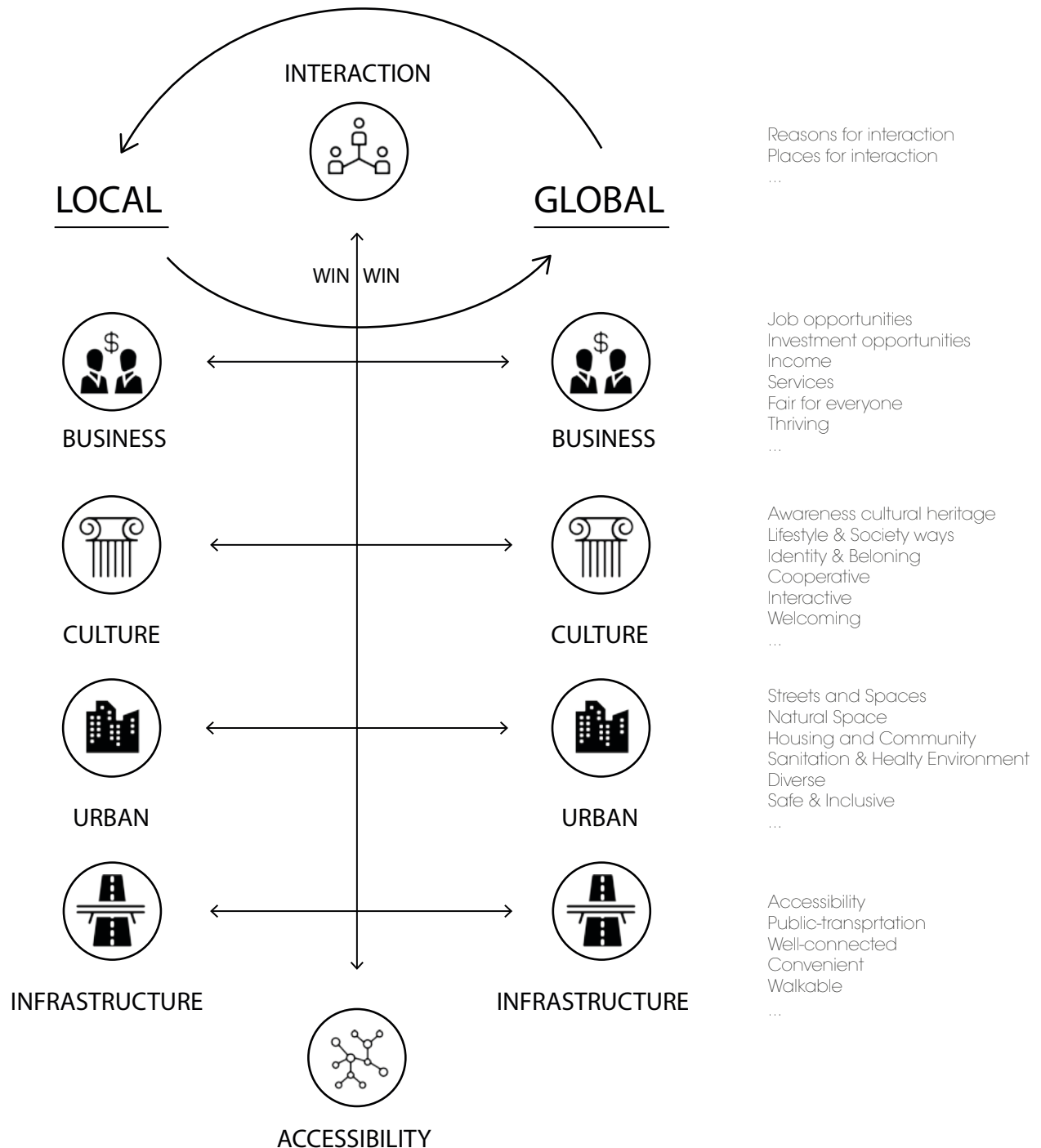
4. Evaluation

Impact | Transferability | Recommendations

*Throughout the previous chapters gradually zooming in, a link between global and local has been explored through theory and analysis and nourished through design. In order to answer the main research question: **'How can urban planners and designers shape the Belt and Road Initiative to create interactive urban environments for a globalized future?'** the final chapter zooms out back to the global scale the research took off from, and examines the impact and the future potential of the reimagined border cooperation centre. Development and research suggestions are given, with the sincere wish for this thesis to spark a discussion through further studies.*

Design impact

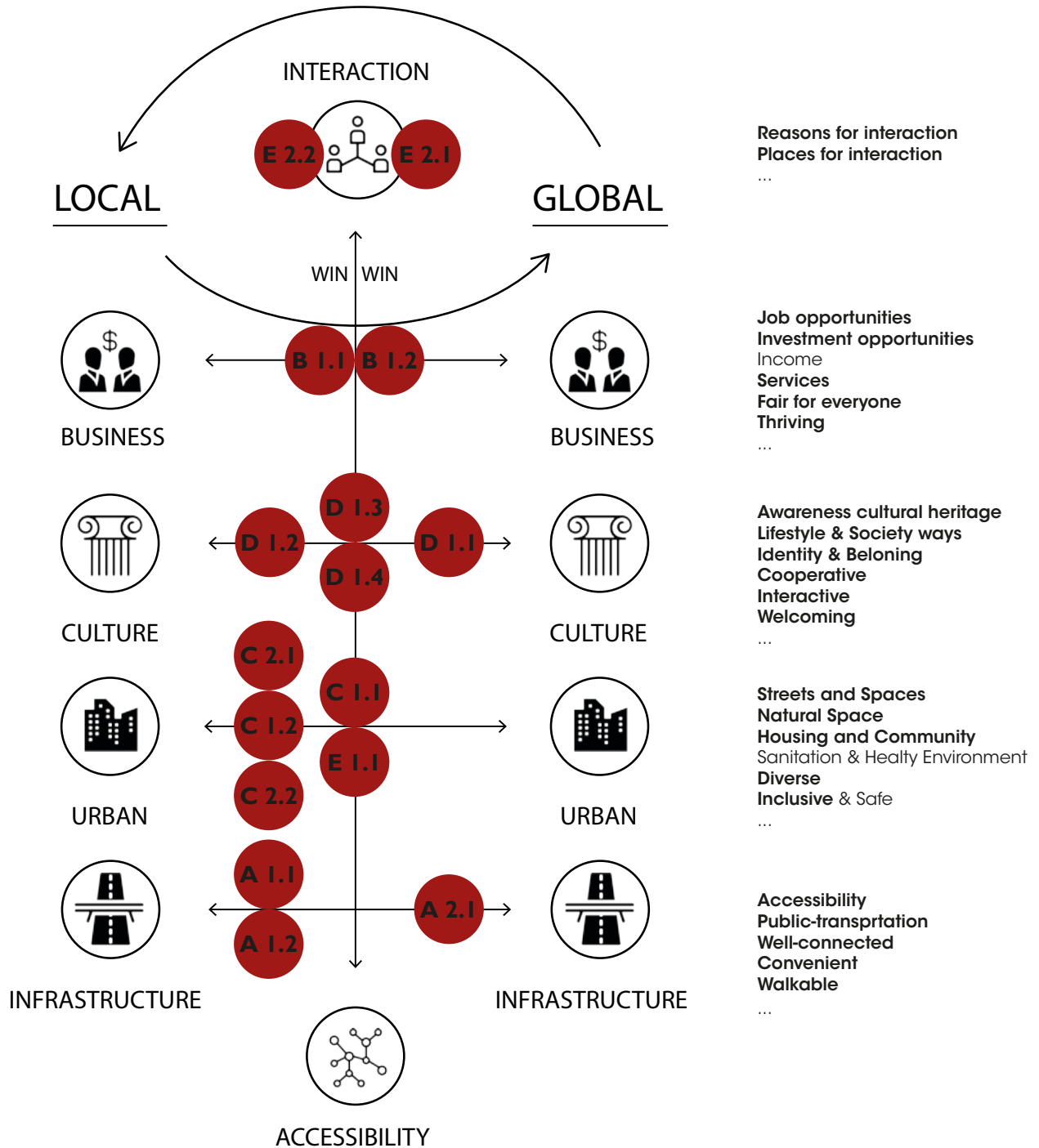
Evaluation and assesment framework



The framework for global-local interaction generated for the design of the ICBC can be used to evaluate design and development proposals for their ability to facilitate interaction across scales. Therefore each domain receives qualitative and quantitative attributes that can guide the evaluation and assessment process. Examples of such attributes in the figure above are inspired on placemaking assessment tools, but other assessment tools can be integrated into this framework as well, depending on the required level of depth of analysis.

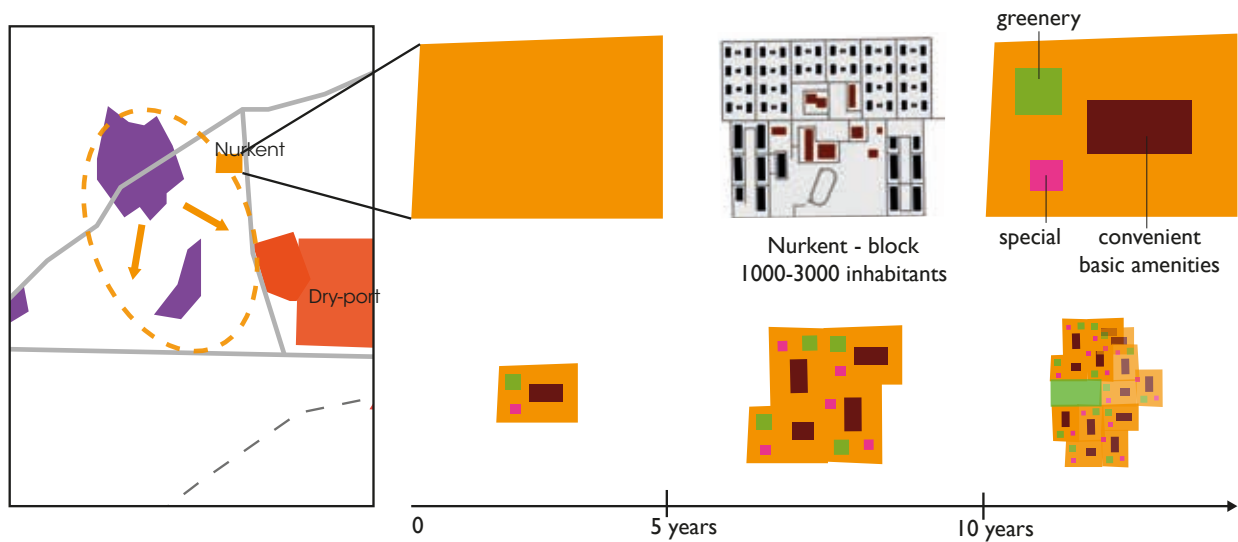
Design impact

Evaluation of proposed design



The framework is used to evaluate the design developed in this thesis. Each implementation is placed in the domain and aspect it addresses. Attributes that the design touches upon are marked bold. Some have been addressed directly (e.g. accessibility and cultural heritage), and some are affected indirectly (e.g. investment opportunities, inclusive).

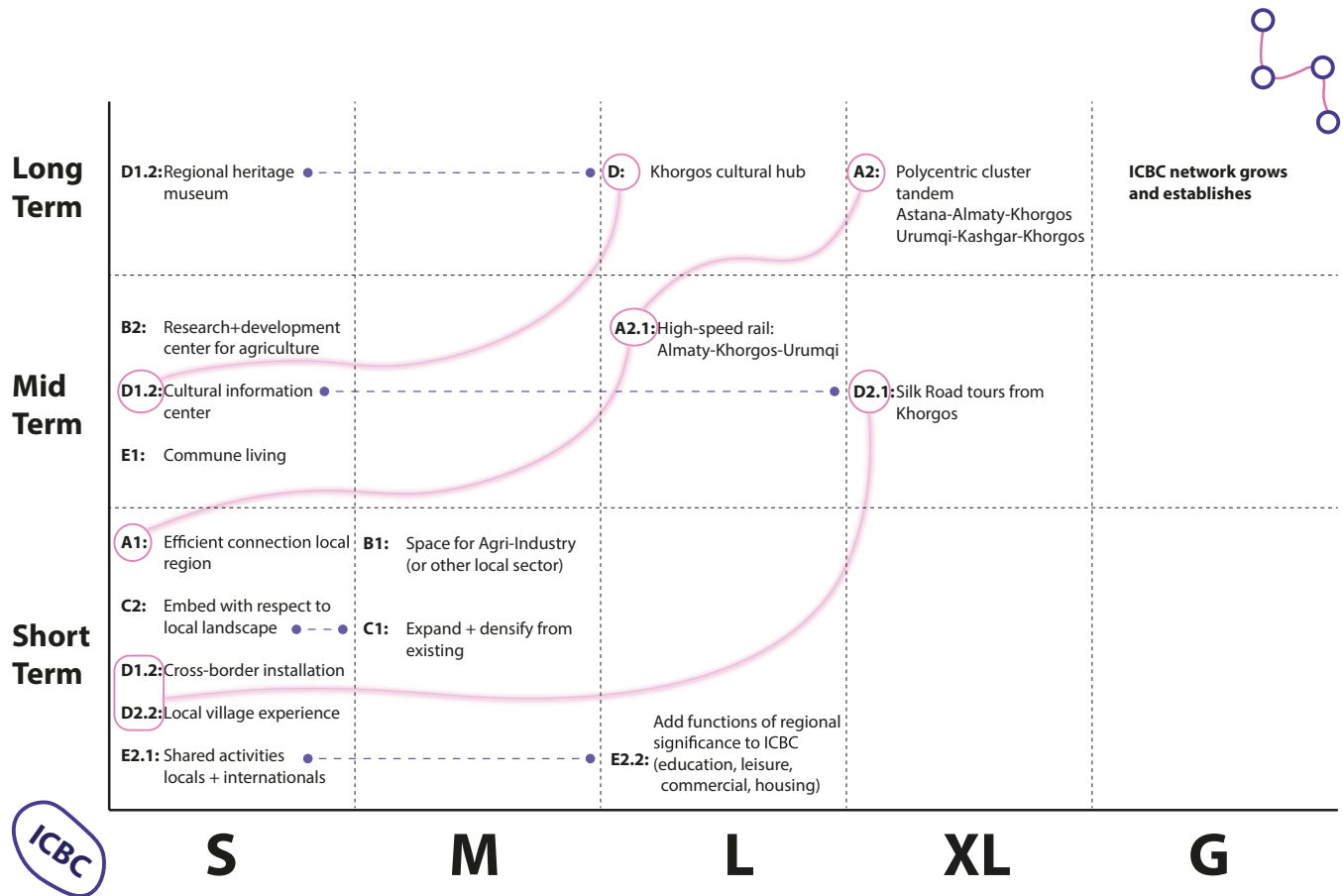
Design impact



For new-towns like Nurkent, the proposal is to develop gradually is self-sustaining urban blocks that have all basic conveniences like green public spaces and commercial areas.

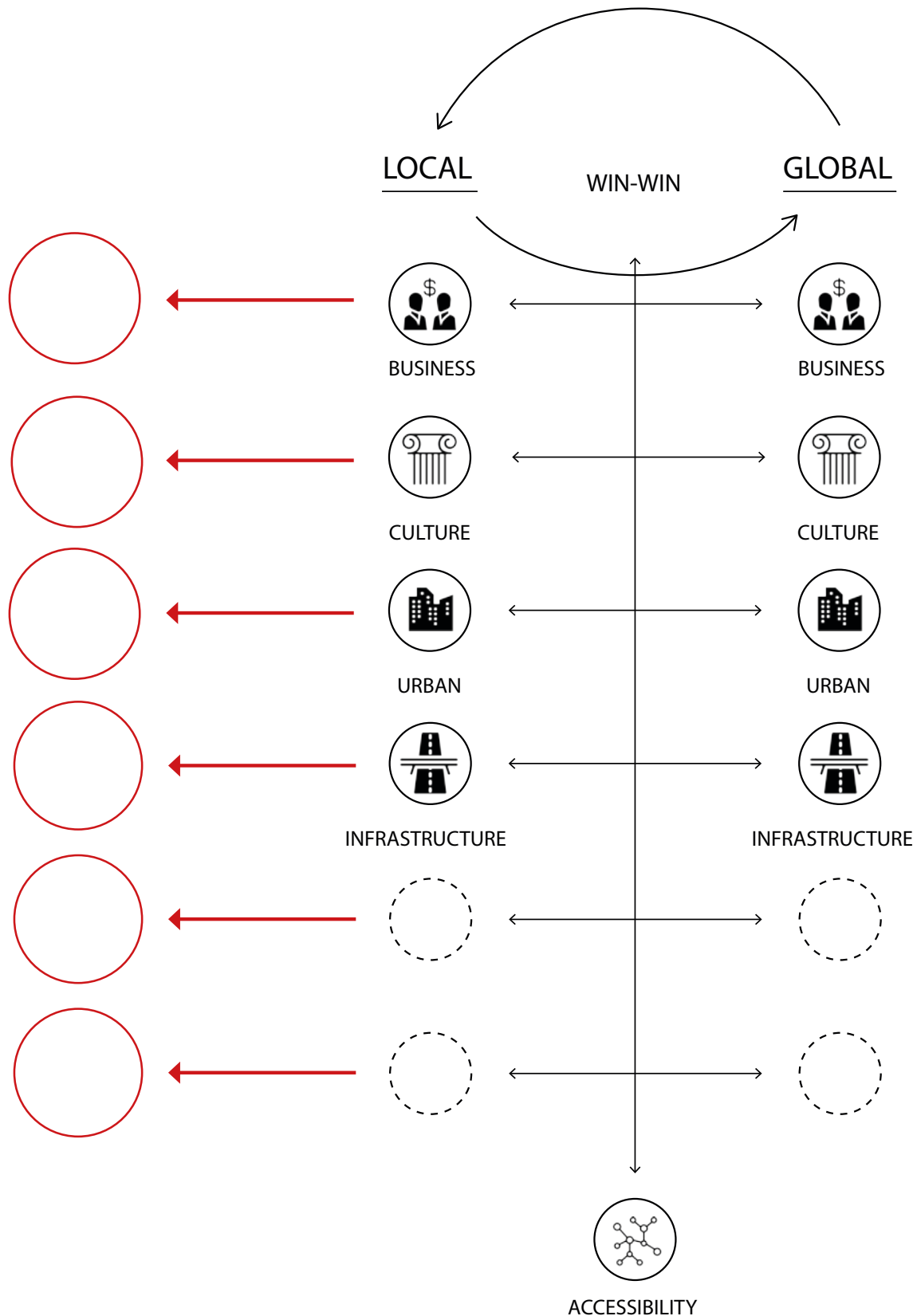
Design impact

Timeline



For the development framework, the implementations can be divided into long-term, mid-term and short-term solutions. Some implementations, like good access roads and relevant programme in the ICBC, lay a fundament for future development and need to be executed in first place.

Transferability



The evaluation framework can be developed to have additional or different domains depending on the nature of the location it is transferred to. By assigning attributes, the domains can get different weight relative to each other.

Transferring across border

The obvious first step for transferring the proposed design would be to mirroring it to the other side of the Sino-Kazakh border. In original BRI plans, Khorgos Gateway was proposed to function as one cross-border city. Because of the existence of the border some logistic elements, such as railway station and industrial area appear on both sides of the border. The goals proposed for the ICBC are applicable to the Chinese side of the border; however, the strategies and implementations need to be tailored to the new sites after a detailed analysis of strengths and potentials of the region.

My proposal for the ICBC is meant to reinforce the interaction between the local population and the international inhabitants of the ICBC. However, this degree of openness might be challenged by the political situation in Xinjiang region. The Uyghur Muslim minority is being suppressed by the Chinese government, due to terrorism risk. The region has a turbulent, rebellious past and especially the minority people are being refrained from active contact with foreigners (see the appendix for background article). Given this fact, the free exchange between the Chinese minorities and the internationals will be most likely prevented. This political problem is difficult to address solely through design and even the BRI developments are unlikely to change the current situation, as China has experience in successfully maintaining political isolation while providing favourable conditions for free trade and international business in the eastern cities like Shanghai, Hong Kong and Shenzhen. However, in

perspective of the border cooperation centre being a new kind of instrument within the BRI, certain policies can be imposed onto the limited and protected territory of the ICBC, ensuring that once the visitor is granted access to the centre they enjoy the freedom without consequences of being screened or detained.

Transferring globally

On a broader scale, the 5 development goals defined for the ICBC might be too specific to be readapted directly, after all, they were tailored to the specifics of the given context. The framework of local and global interaction that helped generate these goals, provides the opportunity to evaluate the relation between the global developments and the local context in many other places. A location or a project can be evaluated using the domains 'business', 'culture', 'urban', 'infrastructure' and 'accessibility' in order to define how the global and local elements meet each other. After that based on specific strengths and weaknesses of the location, the development goals can be defined in order to design the needed strategies and implementations. As such, the proposed model is both transferable as well as adaptable.

So far within the BRI network, the concept could successfully be reapplied in other BRI developed (dry) ports, like Gwadar in Pakistan, and Brest where the gauge changes on the border of Poland and Kazakhstan. The framework is also useful for embedding other kinds of infrastructure driven developments into the local context.

Transferability

ICBC as a tool to reconcile local and global forces



Transferability



The border cooperation centre came into existence as a supporting element to the dry-port Khorgos Gateway. For the convenience of trading logistics, the centre received a special status, positioned neutrally between the borders of two nations. The ICBC was branded as the place for international exchange for its economic exchange advantages. On-site, however, there seemed no sight of mutual friendship and benefits. Taking the static design as a starting point, the research examined why the flow is missing.

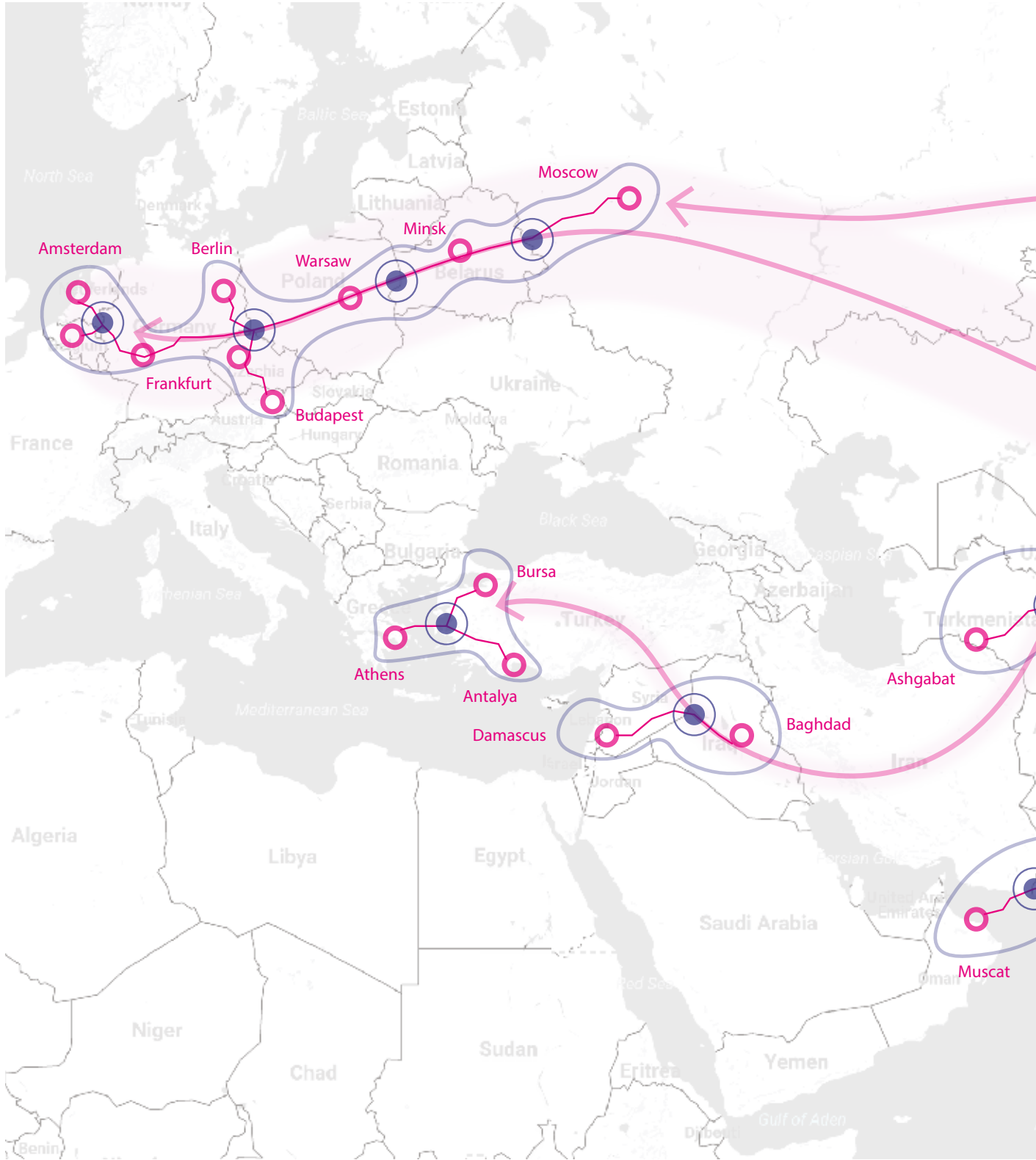
Research through design unveiled the potential of ICBC as a meeting point for local and global forces. The essence of the concept went beyond efficiency and profit as measurements for people-to-people friendship.

The realities of Khorgos region as well as the vision proposed for it, show that quantity does not survive without quality. The BRI infrastructure cannot serve its purpose unless it is embraced by the environment it enters. A development that works for its own benefit is bound to crash as it feeds off something without adding value in exchange.

To establish a constructive flow, people need to want to connect with each other. The key is a fine balance between service and servitude. One can only connect knowing there is something to gain and it is only then one would be willing to invest something in exchange.

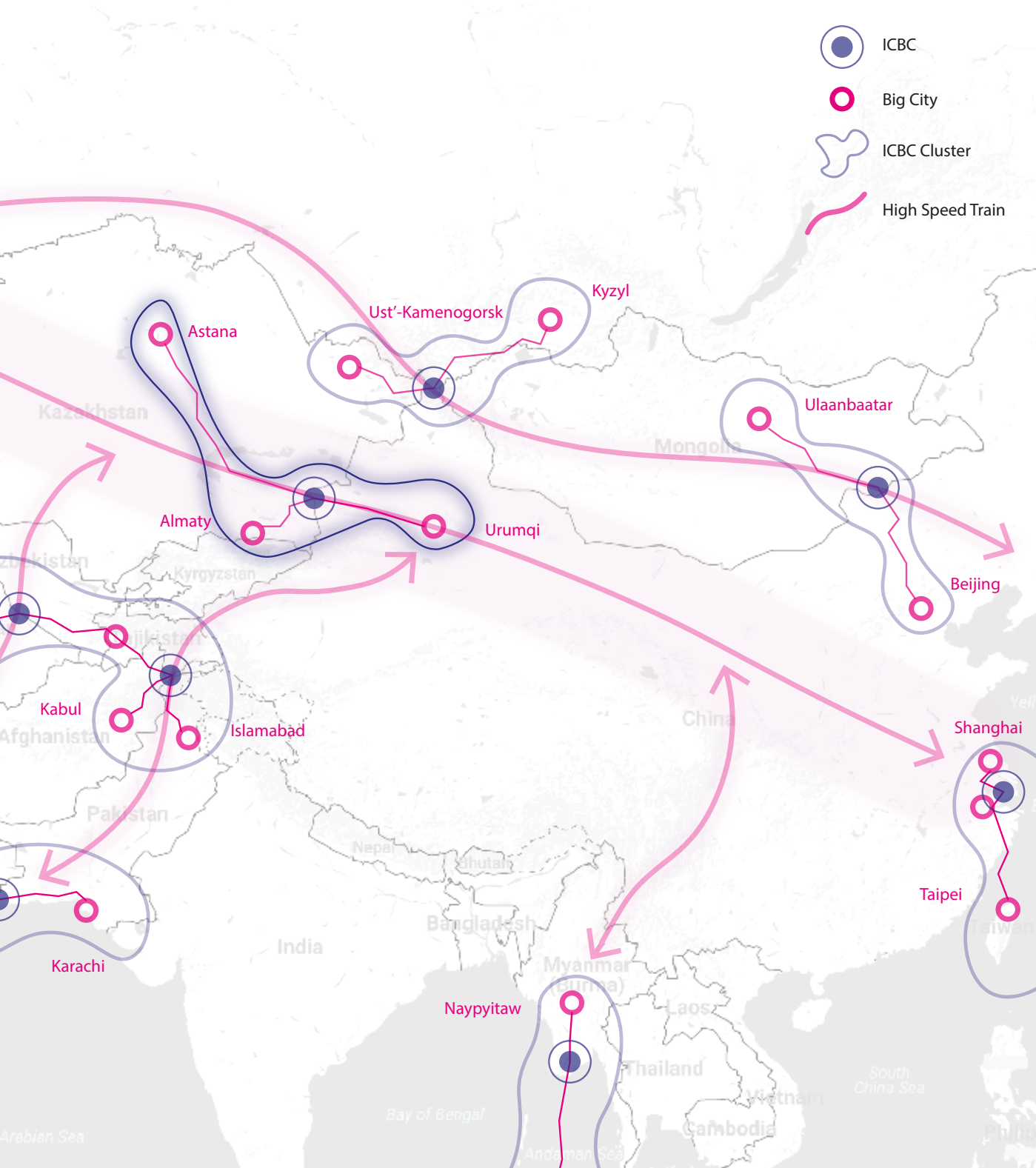
Reimagination of the ICBC is designed to spark a feeding lifecycle of taking and giving. Doing so the ICBC becomes a tool to root the bigger system of the BRI, to bring together quality and quantity and to establish a symbiotic flow.

Transferability

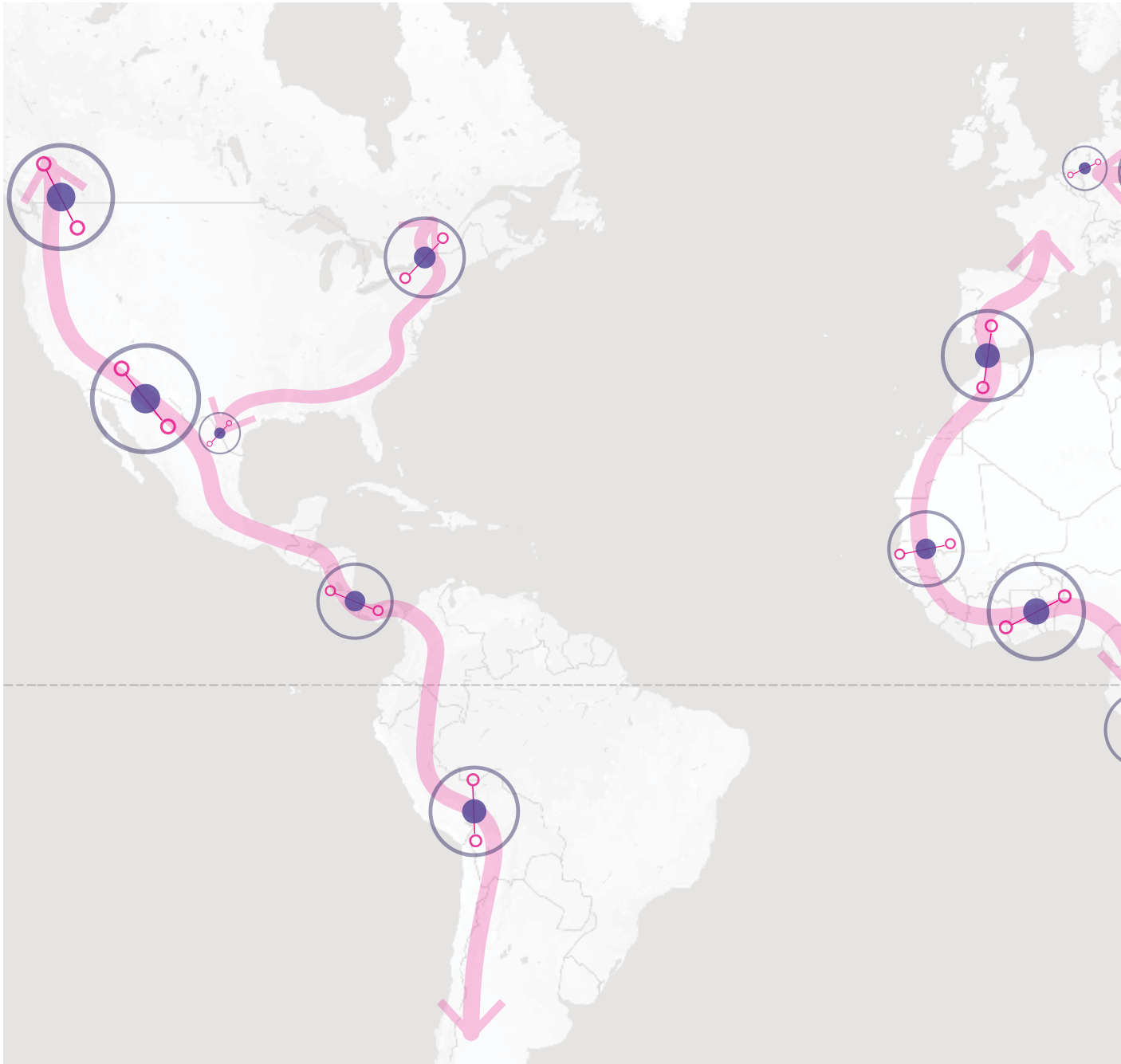


Transferability

ICBC becomes a tool to root the bigger system of the BRI, to bring together quality and quantity and to establish a symbiotic flow.

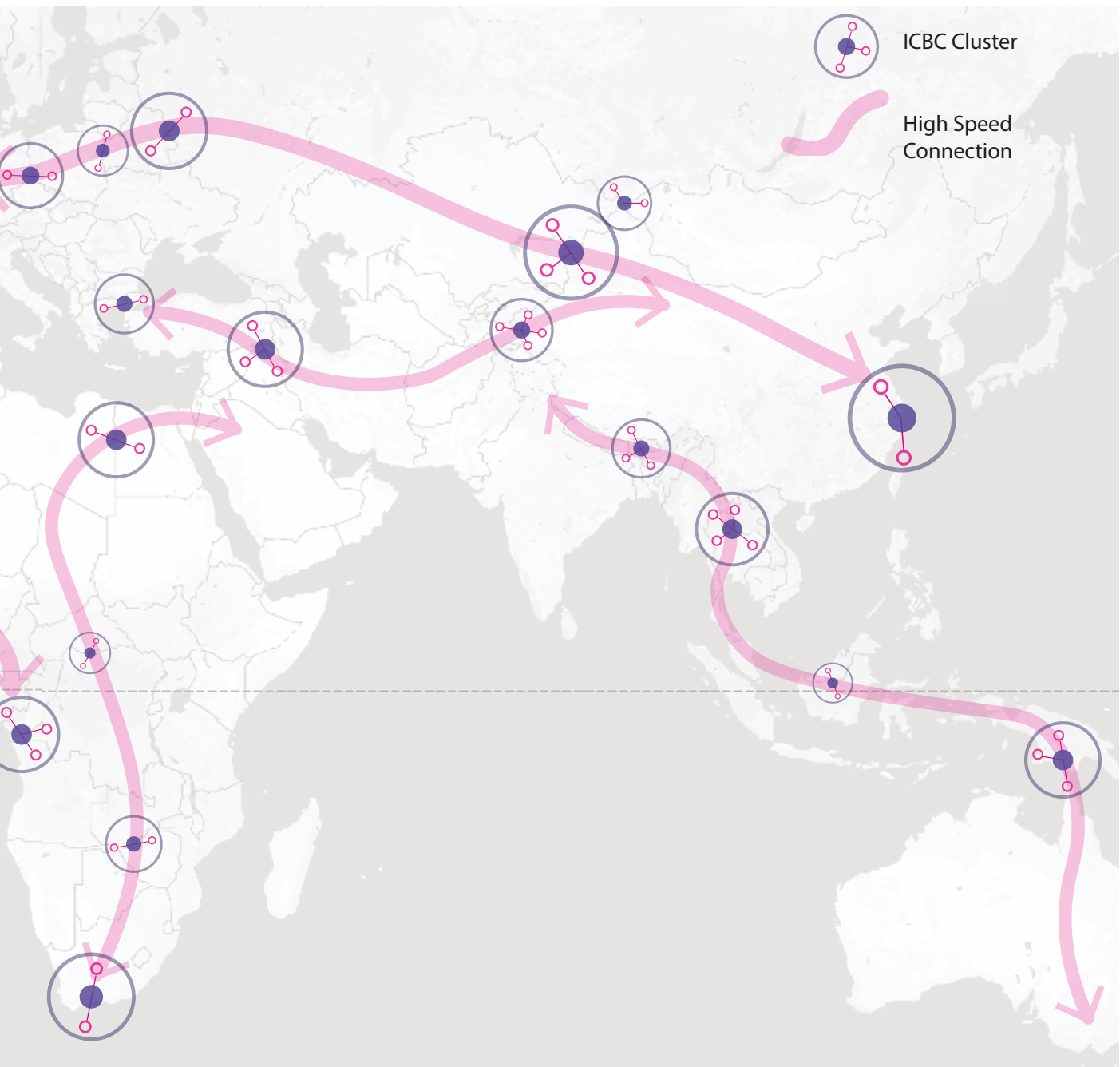


Transferability



Transferability

A future network of ICBC's creates a new neutral dimension, making it possible to move freely between the boundaries of the ruling world.



Recommendations

The point of departure of this thesis was a grand idea making its first baby steps in practical execution. The thesis took a critical stance towards the way this process started happening. And, on its own turn, it gave birth to an ideological concept as ambitious as the practical undertaking it should be of aid to. A worthy companion that could easily fall into the same trap.

This research drew new parallels exploring the issue of the BRI from a human perspective. The resulting design of the ICBC has been a small exercise in bringing philosophy and practice together. Extrapolating ICBC as a concept will require a series of studies to make the idea work in practice. Below follow some recommendations:

1) As mentioned in the transferability chapter, the openness of ICBC as a concept may be challenged by some environments, for example by the political climate. Practice-oriented case-study research is needed to identify these challenges and make the ICBC model more resilient towards them.

2) BRI as a megaproject involves an evenly complex landscape of actors. This thesis abstracted them in two camps, the global and the local one, considering the perspectives

of top decision-makers and local users. In practice, there are many more perspectives to consider. Streamlining the collaboration process in the context of the BRI is a crucial issue that is actively being addressed in the fields of politics. Urban planning and policy studies would help to bridge the gap between the disciplines. A relevant precedent to consider are the EU spatial planning initiatives like the ESDP and cross-border collaboration programmes like INTERREG.

3) Phasing of developments through time is another important aspect that needs not to be forgotten, but remained underresearched in this thesis. Timelines across scales need to be synchronised to support each other and to consist of self-sufficient steps that would make them more resilient for unplanned disruptions in the development process.

4) On a final note, the suggestion is to have a practical take on the recommendations above and investigate them in practice by means of a pilot project in Khorgos, or another border zone location. After all the main challenge in the context of the BRI is to make a smooth transition from theory to reality from words to actions.

5. Appendix

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Field trip preparation	page 228
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Addition to development goal D

As part of the implementation of Silk Route Tours from Khorgos, I developed two tour proposals to illustrate the richness of regional Silk Route heritage.

Xinjiang Tour



day 1

URUMQI CITY STROLLING

discover the vibrant city center of Urumqi, visiting its most famous attractions (mosks, bazaars and main roads).



day 2

TURPAN CITY

emerge yourself into the unique Uygur culture by going around Turpan city. Visit the livestock market (on Fridays only), go see the world largest ancient Islamic tower (Emin minaret) and try the local cuisine. If you have time, take a two hour drive to Shanshan town, to see one the gorgeous sand landscapes in Kumtagh Sand Dunes Park.



day 3

JIAOHE AND GAOCHANG

it is time for the first ruins: Jiaohe (5 km west from Turpan) and Gaochang (30 km west from Turpan) will be visited. Two well-preserved ruins that used to be important Silk Route centers.

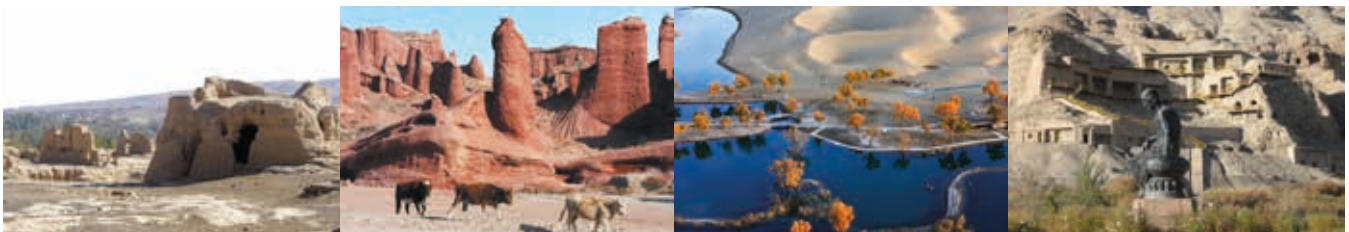
Xinjiang Tour



day 4

YINING

the northern point of the famous Muzart Pass, Yining is an unmissable stop in the Silk Route tour. Take a look at the unique architecture in the city and visit the outskirts, where rural life has changed little.



day 5

AKSU

at the southern point of the Muzart Pass, where both natural and historical sites are a must-see. Aksu has impressive, red stone colored canyons and the Tarim River. Historical spots are the Kizir Thousand-Buddha Cave and the Ruins of Subash Ancient Buddha Temple.



day 6

KASHGAR

the last stop is Kashgar. With a population of over 500,000, it is fair to say that Kashgar 'city life' must be explored. But apart from modern Kashgar life, the city also has beautiful remains of Silk Road times, like Kashgar Stone City, ruins of a once vibrant hub. Other options to visit include Abakh Khoja Tomb, Id Kah Mosque, Karakul lake and Three Immortals Buddhist Caves.

Kazakhstan Tour



day 1-2

ALMATY

the trip starts with Kazakhstan's cultural capital, Almaty. Take the subway and explore the cities' different (old and new) districts. Check out historical museums and try the local food. Get to the top of Kok-Tobe Hill and enjoy a panoramic city view.



day 3-4

TALGAR

Talgar is not far from Almaty. Both the ruins and the natural scenery (the city lies in the middle of a mountain pass) are breathtaking. Take at least a day to check out this remote silk road gem. Since the ruins are not too big, there will be enough time to experience some of Talgar daily life, like visiting the local fish market.



day 5-6

TARAZ

the next stop is Taraz; a city with beautiful, well preserved ancient architecture. Stroll around the city and relive architecture at silk road times. Visit the local bazaar and indulge in some Taraz food.

Kazakhstan Tour



day 7

AKYRTAS

right next to Taraz lies the ancient settlement of Akyrtas: Kazakhstan's stonehenge. Till today, it is unclear what Akyrtas' stone complex was for and when it was built - some say it was the summer resident of a local Arab or Karluk Turk ruler.



day 8-9

KARAMERGEN

another day, another settlement. This time it is Karamergen, a mysterious squared structure surrounded by what used to be walls and towers. When visiting this Silk Road gem, it would be a waste to not also visit the gorgeous Balqash lake, lying just 20 km to the North.



day 10

ASTANA

the trip ends with the vibrant capital of Kazakhstan. There is so much to do here, that taking a day or two extra might be a good idea. Make sure to visit the best architectural spots: the State Theatre, Hazret Sultan Mosque, city park and Baiterek Tower. Also, do not miss the national museum.

Magazine Article

Published in Atlantis Magazine Volume 28.3, April 2018

Special thanks to Polis Platform for Urbanism and Landscape Architecture TU Delft

URBAN REALITIES OF THE NEW SILK ROUTE: A VISIT TO KHORGOS GATEWAY

I had never heard of Khorgos until my recent research on China's Belt and Road Initiative. Khorgos is an emerging logistic hub at the centre of Eurasia and plays a crucial role in the contemporary revival of the ancient Silk Routes. I visited Khorgos to explore how this 'megaproject' of the century touches the ground in 'the middle of nowhere'. The following narrative is based on my research, observations and conversations during my journey.

Belt and Road Initiative
Reviving the Ancient Silk Routes



350 km
→

Almaty

Zharkent

40 km
→

Khorgos

Nurkent

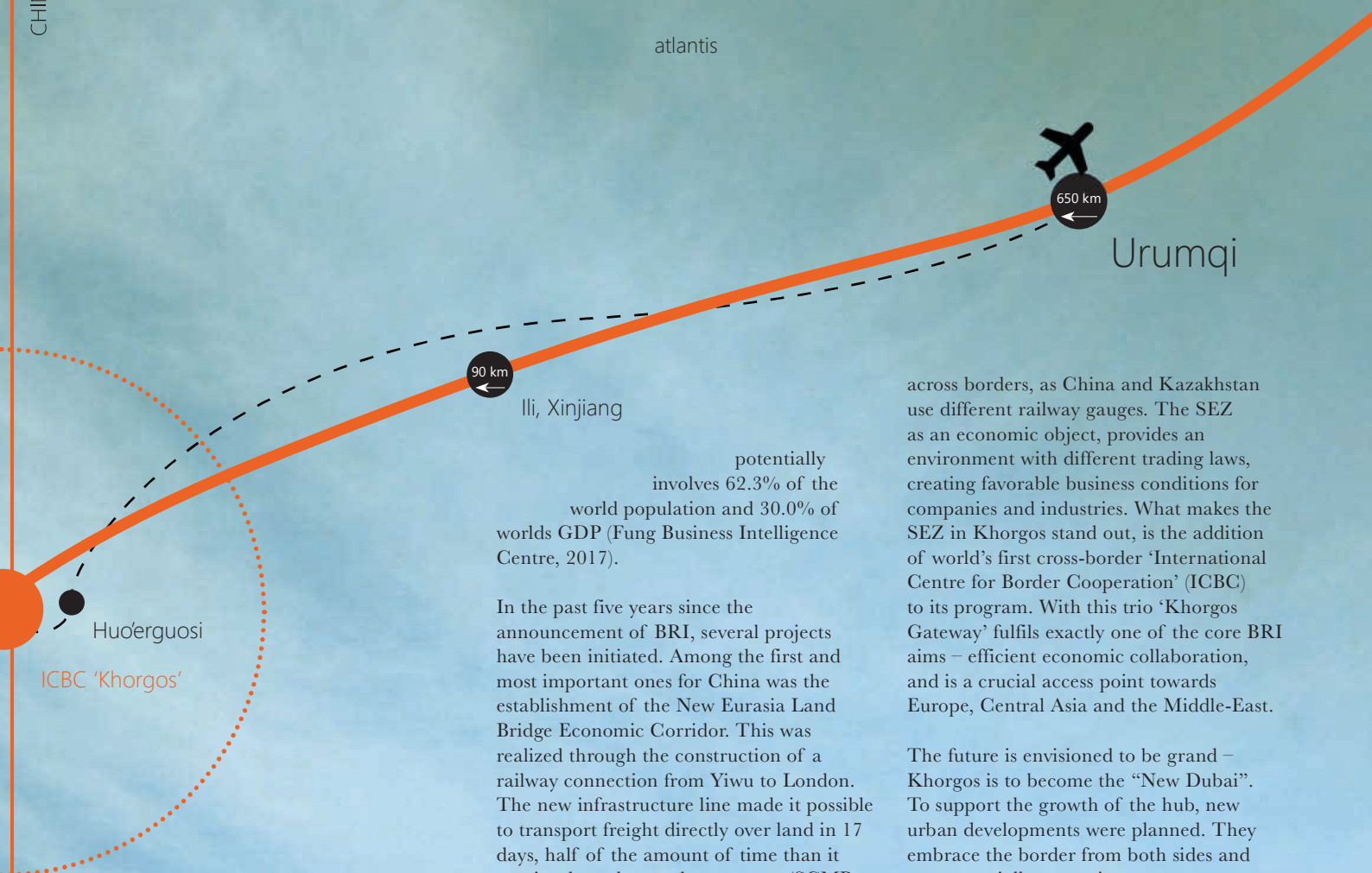
Dry-port
Railway Station

Khorgos Gateway

by

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What is the Belt and Road Initiative?

During his first state visit to Kazakhstan, in September 2013 Chinese president Xi Jinping held a speech at the Nazarbayev University titled 'Promote People-to-People Friendships and Create a Better Future'.

With this China put forward a plan to revive the Ancient Silk Routes in a contemporary form of cross-continental economic collaboration network to strengthen trade and investment partnerships across Asian, European and African markets. In May 2017, during the Belt and Road Economic Forum in Beijing the global community was invited to join powers and contribute to the 'win-win' project of the century (Phillips, 2017).

The 'Belt and Road Initiative' (BRI), also known as OBOR and the 'New Silk Road', consists of two parts: a network of logistic and economic corridors over land, and a series of sea-routes supported by existing and new Chinese ports, essentially providing China better access to Europe, Middle-East and Africa.

Unprecedented in scale, the initiative covers 65 countries across six regions and

potentially involves 62.3% of the world population and 30.0% of worlds GDP (Fung Business Intelligence Centre, 2017).

In the past five years since the announcement of BRI, several projects have been initiated. Among the first and most important ones for China was the establishment of the New Eurasia Land Bridge Economic Corridor. This was realized through the construction of a railway connection from Yiwu to London. The new infrastructure line made it possible to transport freight directly over land in 17 days, half of the amount of time than it previously took over the sea route (SCMP, 2017). What followed, was the development of the railway hub on the border of China and Kazakhstan into Eurasia's largest dry-port and the creation of a new Special Economic Zone (SEZ), 'Khorgos Gateway'.

Khorgos Gateway – change of perspective

When the BRI developments touched the ground at the border of China and Kazakhstan in 2010, it was an empty canvas of wide, wild steppe landscape with the Dzungarian Alatau mountain range rising up on the horizon. The first urban settlements were small towns about 40 km from the border on both Chinese and Kazakh sides, with a few villages scattered around them. The area is remote by definition, situated a couple hundred kilometers away from the Eurasian pole of Inaccessibility, the center point of the continent. It was the presidents of China and Kazakhstan that saw the potential for the 'middle of nowhere' to become the 'center of everything' and initiated the development of 'Khorgos Gateway' a hub consisting of both economic and infrastructural strategic projects.

Infrastructure wise, the dry port was an unmissable object for the transfer of goods

across borders, as China and Kazakhstan use different railway gauges. The SEZ as an economic object, provides an environment with different trading laws, creating favorable business conditions for companies and industries. What makes the SEZ in Khorgos stand out, is the addition of world's first cross-border 'International Centre for Border Cooperation' (ICBC) to its program. With this trio 'Khorgos Gateway' fulfils exactly one of the core BRI aims – efficient economic collaboration, and is a crucial access point towards Europe, Central Asia and the Middle-East.

The future is envisioned to be grand – Khorgos is to become the "New Dubai". To support the growth of the hub, new urban developments were planned. They embrace the border from both sides and can potentially merge into one mega polis in the next 30 years. For now, on the Chinese side, in a former village - Huo'erguosi, skyscrapers are growing by the minute so that this village can become a 200,000 people robotics manufacturing hub one day. On the Kazakh side, plans for a 100,000 inhabitant town are progressing slower. So far, the city of Nurkent was constructed to house about a thousand people, and Nurkent 2, similar in size has been announced recently.

The local experience

Nevertheless, a simple change of perspective takes time to live up to. Khorgos Gateway, operating full-time now, remains a challenging destination for an average traveler. First, the predominant language for international communication across borders is Russian, with English limited to the navigation signs in the airports and along the highways. Furthermore, it takes 6 hours by bus or taxi to Khorgos from Almaty and double the amount of time from Urumqi, currently the closest cities in the area with international airports (although there are plans for a new airport near the border). Twice a week it is possible to reach Khorgos from the direction of Almaty, Astana and Urumqi by hopping off at the Alashankou railway

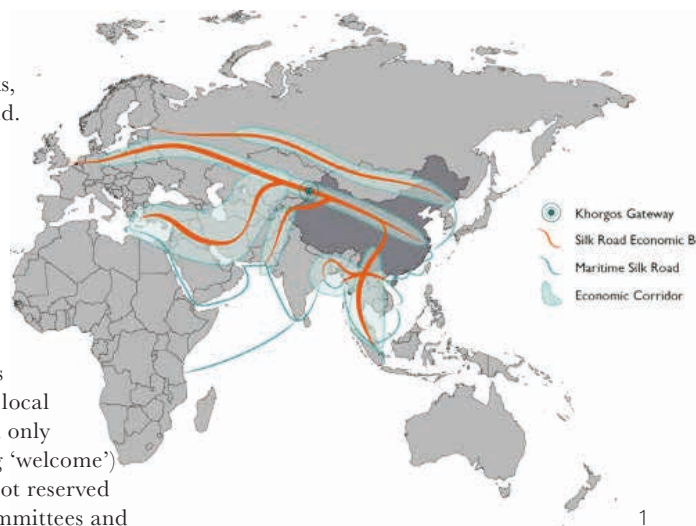
station near the dry-port.

Kilometers of blank space of untouched landscape between the new developments of the Khorgos Gateway indicate the future potential of the hub. At the same time it feels like the human scale is left out of the equation during development. Considering that all the inhabitants of Nurkent (20 km from the border), work in the dry-port, there is no proper railway connection. It seems so strange that these people are forced to depend on cars, as the new-town they lived in was too far away from their work. The long distance aside, there are no walking or biking paths along the highway to offer a convenient alternative and protection from the burning sun in the summer or the icy winds in the winter.

As for brand-new Nurkent itself, it nevertheless struggles to inspire. Although the settlement is inhabited to its full capacity, it gives an empty impression. It may be because of the absence of a decent public space and the cozy tree-framed alleys, but there are barely any people on the streets of Nurkent. There is no public life. The inhabitants confirmed, work opportunities aside, there is nothing to do in Nurkent. Strangers to each other, people from different towns and villages across Kazakhstan are brought together in Nurkent by work, but don't have a place to socialize. If they get to live in housing typologies with shared space, neighbors get to know each other. In other cases, such as

the stand-alone houses this is much less likely to happen. There are no parks, just an occasional grass field. Shockingly (for a planned city), the shops are stuck up in office rooms of a "community center" because of the lack of a proper shopping facility. The last resort for a sense of public life is the public bathhouse, gyms and the kindergarten. The local cafeteria (with the first and only English sign in town saying 'welcome') remains empty when it is not reserved for banquets of visiting committees and officials. Although the housing conditions are decent, and the kids play outside joyfully, young adults are not happy living in Nurkent. To hang out with friends or have some quality time with the whole family, Zharkent, a 20-minute drive away is the place to be.

It's hard for the new Nurkent, to compete with the established Zharkent or even the small villages around it, as it lacks both the diversity of a big city as well as the freedom and community feeling of the villages. For example, it puzzles the inhabitants of the stand-alone family houses of Nurkent, why they are not allowed to construct their own banya (small bathhouse) on the adjacent piece of land belonging to their property.



The apartment buildings are seen more like an unavoidable necessity as most people strive to have a house with outdoor space to grow fruits and vegetables, hold animals, have a private garage or a play garden for children. While in Nurkent there is no such option, the 130-year-old Zharkent is currently expanding by making land available for private developments and welcoming new inhabitants that leave their villages behind.

Given the fact that the future for ICBC are meant for more than just trading, I tried to understand the local attitude towards ICBC at the border as a potential solution for the missing entertainment. I found out that among the locals the trading center is seen exactly for what it currently is, a wholesale market for cheap Chinese goods, without much hope for improvement in the future. It would need to be a big luxurious shopping and entertainment center, like the ones built in the 'million cities' Almaty and Urumqi, for it to attract masses of people on daily basis. For now, a visit to ICBC is a day-trip activity, complicated by long lines and security checks at the customs. On the territory of ICBC trade seems quite one sided for now, with the Chinese selling and the Kazakh buying. The cheap price of goods is worth the hassle for individual customers even though traders are held back by the tight export limits of 50 kg and 1500 euro per person per day. The local markets of Zharkent and the few shops in Nurkent are filled with goods from wholesales in Almaty, Astana or even Urumqi.

Tension between (global) expectations and (local) reality

Khorgos Gateway development gives big hopes for the future. Making the infrastructure of Khorgos Gateway functional for the first train to run from Yiwu to London, the first CEO of 'Khorgos





Gateway', Karl Gheysen convinced the global community that the vision for 'the New Dubai in the steppe' can become a reality (Shepard, 2017). However, this was not enough to win over the locals that are hopeful, but also skeptical or in their own words 'realist', about the development. "Even if it would become a big city in the future, what does this give me now? I can't live for 20 years feeding of tomorrows", sighs one of the locals'. And this is understandable after seeing the daily life in Nurkent, and some of the challenges within the region.

For example, the high-tech dry port struggles to reach its full potential. For political reasons 80% of the freight flow, is still being handled by Dostyk station about 400km to the north across the border (Shepard, 2017).

The vision of a future mega polis is further challenged by the demographics of the region. Kazakhstan with a population of 18 million, just recently performed a population shift, moving its political center point to the brand-new city of Astana in the north. Nevertheless Almaty, just 350 km away from Khorgos, remains the wealthiest and largest city with 1.5 million inhabitants. The Xinjiang province across the border with most of its inhabitants living in the 2.5 million populated capital Urumqi, continues to lose inhabitants despite the recent rebranding into BRI's cornerstone region. The Chinese government created a lot of favorable conditions in Xinjiang to attract companies and investors, but most prefer to work their way around and stay in the bustling East of the country. "Since the announcement of the BRI,

many companies registered in Xinjiang get the economic benefits, but they don't want to move their business here because it does not have a very big population and the government controls for safety reasons causes a lot of inconvenience" one of the traders in Urumqi said. Since the terrorist attacks in 2009, Xinjiang prioritizes safety and stability over economic growth.

Urumqi shows another challenge that Khorgos might need to battle; empty wholesale markets, that welcomed thousands of people on daily basis just 5 years ago. Digitalization of trading through social platforms like WeChat (Chinese WhatsApp with a digital wallet), made frequent visits to physical malls unnecessary. With further progression of this trend, the brand-new ICBC might suffer the same fate.

This raises the question: can Khorgos Gateway overcome these challenges, and attract enough people to match the density and prosperity of its role-model Dubai? And should it?

Khorgos: The New Silk Route city of the future?

The strategic value of Khorgos for the BRI is evident in the economic benefits that the efficient infrastructure has brought on the (inter)national scale. This certainly provides a good fundament but doesn't guarantee a successful future for Khorgos as a bustling city. Competing with established cities like Almaty and Urumqi isn't a simple task. What Khorgos needs is a unique selling point that would attract people on both local and regional levels. Going beyond

provision of jobs and housing, the true potential lies in understanding the dynamics of the local communities and their current needs. Rather than mimicking Dubai or other metropolises, Khorgos could stand out by mixing the rural character of its current context with the convenience of a globalized city by providing conditions not just for good international trading but for a good daily life as well. •

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1. The Belt and Road Routes
2. The local 'shopping centre' of the new Nurkent
3. Although disappearing, there are numerous small villages surrounding Zharkent where local people run their own households.

Theory paper

Written for the graduation course ARU022 “Theory of Urbanism”.

The Belt & Road Initiative through the Lens of Urbanism

A brief introduction of China's Belt and Road Initiative for urban planners and designers.

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May 2018

Abstract – this work aims to address the gap in the emerging body of literature on China's recently announced Belt and Road Initiative (BRI), covering this topic from the perspective of urban planning and design. The paper provides a comprehensive overview of the current state of the BRI and its instruments; explores the challenges relevant from the perspective of urban planning and design; and discusses BRI's possible role in a new wave of urbanisation. Existing body of urbanism literature offers useful concepts and tools to guide the BRI development, but the knowledge needs to be integrated into a practical system adapted to the BRI context. This introductory paper is a call for action towards further, systematic research of the BRI and the urbanisation it is about to trigger.

Key words – Belt and Road Initiative, Khorgos Gateway, Globalization-driven Urbanization.

Introduction

Since its announcement in 2013, the Belt and Road Initiative has been an emerging topic of media coverage and academic research in the fields of economy (L. K. Cheng, 2016; Djankov & Miner, 2016; Y. Huang, 2016; Yu, 2017) and international relationships (Blanchard & Flint, 2017; Y. Cheng, Song, & Huang, 2017; Ferdinand, 2016; Liu & Dunford, 2016). Pioneering body of research on the BRI in these fields consists of comprehensive overviews explaining the initiative (Ferdinand, 2016; Shukla, 2015) and its impact on global geo-economics; as well as in depth analyses of China's motives (Djankov & Miner, 2016; Y. Huang, 2016; Yu, 2017) behind the BRI, its objectives and instruments (Swaine, 2015). Generally there is a distinction between political, economic and infrastructural elements of the BRI, but infrastructure is being mentioned only occasionally as an instrument to reinforce

connectivity for the sake of collaboration. Nevertheless, there seems to be an implicit consensus among the authors above, that the BRI will trigger more urbanisation to happen, put into words by Nalbantoglu (2017, p. 96). It is striking that over the past two years in which the BRI-literature emerged, this topic has not yet been discussed in the field of urban planning and design. The 'mega-project of the century' (Clover, Ju, & Hornby, 2017) has been widely covered in media (Z. Huang, 2017; Manuel, 2017; Ortolani, 2018; Wong & Lau, 2017; Yan, 2015) in particular for the transformative potential of its infrastructural component for the countries and cities involved.

This paper aims to provide urban planners and designers with understanding about what China's recent Belt and Road Initiative exactly is about and reframe it as

infrastructure and generate business for Chinese engineering and construction companies, to support its domestic market. Nalbantoglu argues that for this reason BRI is ‘essential for the survival of a stable China’ (2017).

Western politics and media face the BRI with lot of critique and distrust, fearing the BRI to be a sophisticated form of colonisation. Nevertheless China firmly promotes the BRI as a vision for a better future emphasising in its campaign the benefits of all partners joining forces. The five key goals BRI sets to benefit collaboration are: ‘policy coordination’, ‘facilities and infrastructure connectivity’, ‘unimpeded trade’, ‘financial integration and people-to-people bonds’ (Y. Huang, 2016). Media and academics are divided about the degree of altruism behind China’s initiative. In my opinion the BRI could definitely be of benefit to countries other than China, if the win-win principle can be secured by reinforcing it with concepts of complementarity for example (Dühr, Stead, & Zonneveld, 2007). Moreover, I think the success or failure of the BRI fundamentally depends on the way the initiative is translated into spatial terms and daily lives of people. Among BRI’s five goals there are two with this potential: ‘people-to-people bonds’ and ‘infrastructure connectivity’, however what needs more explicit attention is the urbanisation that will take place as a consequence of the BRI.

2.2 BRI Instruments

In existing literature discourse the complexity of the BRI is tackled by breaking it down into its political, economic, functional or strategic components. In my work I will explain the Belt and Road Initiative by presenting the various instruments that were designed to foster international collaboration and connectivity.

Swaine (2015, pp. 3, 4) distinguishes economic and diplomatic elements in the BRI. Liu and Dunford (2016) talk about channels of communication, nodal infrastructures and financial instruments. From

financial perspective, Yu (2017) distinguishes capital loans and technical services as means to facilitate infrastructure development. Huang (2016) highlights cross-border projects as a distinct feature of the BRI and lists railways highways, pipe- and electricity lines among it. Fitting in the same sequence are also the Special Economic Zones that China actively uses to strengthen its trading relationships with neighbouring countries.

Based on literature and my own understanding I distinguish three groups of instruments: ‘politico-economic’, ‘socio-cultural’ and ‘spatial’. While the politico-economic group of instruments contributes to success of BRI on the level of governance across various scales, the ‘socio-cultural’ and ‘spatial’ groups shape the physical manifestation of the initiative. Having said this I don’t want to diminish the relevance of the economic benefits for BRI’s success, but I would like to emphasise that ‘politico-economic’ elements concern the group of actors directly involved with the initiative more, while the remaining elements potentially impact a much wider scope of actors and users.

2.3 First results

Among the first and most important infrastructure projects initiated as part of BRI, was the establishment of the New Eurasia Land Bridge Economic Corridor. The new railway line made it possible to transport freight directly over land in 17 days, half of the amount of time than it previously took over the sea route (SCMP, 2017). What followed, was the development of the railway hub on the border of China and Kazakhstan into Eurasia’s largest dry-port and the creation of a new Special Economic Zone (SEZ), ‘Khorgos Gateway’. Other recent BRI projects include the development of Gwadar port in Pakistan, railway to Iran and pipeline network across Central Asia.

2.4 Khorgos Gateway as study-case

Although one development hardly can be representative for the whole BRI, the ‘flagship’

BRI Goals	COLLABORATION				
	Financial integration	Unimpeded trade	Policy coordination	Connectivity	People to people bonds
BRI Instruments	Politico-Economic Instruments			Physical Instruments	Socio-cultural Instruments
	Capital loans, Technical financial instruments	Economic corridors, trading agreements	Diplomatic agreements, policy programmes	Nodal infrastructures: Roads, Railways, Ports, Airports, Telecommunications networks, Pipelines, Development Zones and Cities	Silk Road cultural legacy, Educational programmes, Cultural exchange programmes, Chinese Culture Institutes.
			Special Economic Zones		

Figure 2: BRI goals and instruments. Image by author.

(Z. Huang, 2017) project Khorgos Gateway illustrates strategic combining of various BRI elements, and as such the potential transformative power of the initiative and the scope of challenges the BRI might face elsewhere, serving as an valuable study-case.

Khorgos Gateway reflects the ‘thinking in opportunities’ spirit China puts forward with BRI. The BRI development, proposed by the presidents of China and Kazakhstan, touched the border region for the first time in 2010, when the New Eurasian Land Bridge Railway got realised. Before that, the region remote by definition, was untouched steppe landscape with a dozen small villages scattered around, with Eurasian Pole of Inaccessibility practically around the corner (Shepard, 2016).

‘Opportunity thinking’ reflects further in the multifunctional programme of the hub. Infrastructure wise, the dry port was an unmissable object for the transfer of goods across borders, as China and Kazakhstan use different railway gauges. The SEZ as an economic object, provides an environment with different trading laws, creating favourable business conditions for companies and industries. To exploit the full benefit of the central position, world’s first cross-border economic cooperation zone, the ICBC is added. With this trio ‘Khorgos Gateway’ already fulfils two of the core BRI goals – ‘infrastructure connectivity’ and ‘unimpeded trade’.

To support the development of the hub new urban developments on both sides of the border are planned. On Chinese side it’s a 200.000 people robotics hub, and on Kazakhstan-side a 100.000 town for the workers of the SEZ. In the future the hopes are for the towns to merge into one big mega polis, the ‘New Dubai’ of Eurasia (Shepard, 2016). This is where the BRI- dreams become to look slightly far-fetched. Looking at the current progress, in both infrastructure and urban areas, a big contrast is visible in the pace of developments on Chinese and Kazakh sides of the border. While the Chinese city adds buildings with the day, Kazakhstan managed to construct just one settlement of 1000 people so far. It seems there is no case of cross-border collaboration, both sides execute their part of the big plan independently according to their capability.

The problematic urban developments in Khorgos Gateway illustrate the focus of the current BRI approach to development; top-down and focused on economy and infrastructure. The underlying problem is that urban development is subservient to infrastructural and economic goals; this even reflects in the name of the project ‘Khorgos Gateway’ rather than ‘Khorgos City’.

As crucial as economy and efficiency are for BRI in the politico-economic realm, as fundamental to its success is the quality of the built environments in the spatial realm.

2. Discussion

3.1 BRI as a carrier of urbanisation

Previously I identified the different political, economic, social and spatial instruments the initiative consists of. Precedents show that urbanisation and economic growth go hand in hand together. Historically, increasing trade would promote development of the cities, as happened in case of the Ancient Silk Route, the conceptual predecessor of the BRI. However nowadays, the reverse happens too, where new urban developments are used to attract investors and as such boost the economy of a certain region. Industrial and technological new-towns, like Konza Techno City in Kenya and Eko Atlantic development in Nigeria are just some examples of such practice (Marcinkoski, 2017).

The case of Khorgos Gateway shows how new trade agreements and infrastructure provide opportunities for development and growth of new places, but it also exemplifies the role of new urban settlements as facilitators subservient to these economic developments. As such it is highly likely that the BRI generated urban environments will be of the same kind as the large-scale urban developments that happened in China the past 20 years and are rising up across Africa, Asia and the Middle-East today. Habracken (2016, p. 58) criticizes such repetitive and uniform built environments to misfit the contemporary ‘society that prides itself on freedom of self-expression’. Taking into account that this social trend will continue and globalisation will diversify our communities even further, I would like to believe that by reviving the Ancient Silk Routes through the BRI, we can rethink current urbanisation to generate urban environments as vibrant and multicultural as the ancient megapolises the Silk Road became famous for. To do so, first of all urban environments should be revalued as core *places* for human interaction. Social and spatial relations are mutually constitutive (Soja, 1985, p. 177). In one way space reflecting the social relations is produced and reshaped by social practice, in another way space itself, giving body to social relations creates a place for their existence. For example phenomena like slums, are a spatial reflection of polarization that starts in society and economy (Holston, 2001, pp. 333–340). We should know that space can support this polarization to develop further, but also that it can be the key to breaking out of vicious cycle and that we should anticipate this by creating fairer places.

The BRI bears the potential to carry this change, as good infrastructure and economic conditions provide a stable base to develop from. But urbanisation as a process needs a prominent place on the BRI agenda too, as there are various challenges the BRI might face.

3.2 Challenges for the BRI

BRI as a cross-continental megaproject (Gellert & Lynch, 2004, p. 15) aiming for improved connectivity and collaboration will fundamentally be challenged by tangible and intangible borders. As a spatial phenomenon, borders embody the fronts of less distinct differences between political, economic and cultural contexts. The research on the complex relationship between social and spatial problems of border regions has emerged into the field of border studies (Anderson & O'Dowd, 1999; Brunet-Jailly, 2005; Kolossov, 2005; Newman, 2003), providing context and frameworks for studying and developing border regions. In practice, when it comes to the challenges of cross-border cooperation, I find EU to be the most relevant precedent for the BRI. The case of EU spatial development shows how after the physical borders between the individual countries got alleviated, it took almost two decades to bridge different social, economic, political and spatial cultures in order to reach a deeper and more active level of collaboration. This happened through active development of collaboration programs among which INTERREG and large-scale spatial planning initiatives like ESDP (Dühr et al., 2007), through which collaboration manifested in space.

In case of BRI, the physical borders between partnering countries, are not to disappear anytime soon. Although BRI's infrastructural and political elements successfully cross the national borders, the non-physical, cultural in the broadest sense of the word, barriers may be stronger than the ones Europe dealt with. Exemplary here are China's own borders:

strictly controlled, impermeable boundaries protecting a culture and political system that puzzles the outside (western) world. With the BRI China aims to spread Chinese values and culture (Li, 2017), and as such demystify itself and become facilitator of international collaboration. However before getting there, the main question remains whether China can break out of its own boundaries, in a way that goes beyond business, through spatial expression that reflects the harmonious win-win approach.

Another great challenge lies in coordination of developments: horizontally between countries and vertically across the different scales. In its current proposals the BRI has a clear focus on horizontal coordination. In case of Khorgos Gateway coordination is visibly lacking in both directions. The big plan to jointly develop a cross-border hub, resulted in two groups of developments on each side of the border that are happening with contrasting speeds; fast on the Chinese side and slow on the Kazakhtan side. On the Kazakhstan side the challenges for vertical collaboration become vivid, as the separate objects of one plan, developed by different companies rise up in isolation from each other (Otmakhova, 2018).

3.3 Role of spatial planning and design in context of BRI

The strong focus on connectivity and collaboration the initiative carries, the main role of spatial planning and design in context of the BRI is to *facilitate collaboration* across boundaries and throughout scales. Visions, strategies, plans and programmes on transnational, regional and local scales are needed to direct the efforts, negotiate the conflicting interests and create cohesive environments (see figure 3).

When shaping urban environments and implicitly the social interactions that will take place within them, urban planners and designers take on the role


BRI Goals	COLLABORATION						
	Financial integration	Unimpeded trade	Policy coordination	Connectivity	People to people bonds		
BRI Instruments	Politico-Economic Instruments			Physical Instruments	Socio-cultural Instruments		
	Capital loans, Technical financial instruments.	Economic corridors, trading agreements.	Diplomatic agreements, policy programmes.	Nodal infrastructures: Roads, Railways, Ports, Airports, Telecommunications networks, Pipelines, Development Zones and Cities.	Silk Road cultural legacy, Educational programmes, Cultural exchange programmes, Chinese Culture Institutes.		
			Special Economic Zones				
Spatial Planning and Design Tools	Trans-territorial Vision, Spatial Development Perspective.					XL	Spatial Cohesion across borders and scales
	Structural Visions, Polycentric Development Strategies, Cross-border Cooperation Programmes.					L-M	
	Embedding Infrastructure			Placemaking Urban Interaction Design		S	

Figure 3: Positioning of urban planning and design in context of BRI with some examples of tools. Image by author.

of mediators between the diverse stakeholders involved. The BRI involves an extremely wide range of actors, varying from national governments all the way to local users. Especially in case of BRI it is important for us to search for and maintain a balance between the global and the local forces as the city is an entity that is shaped by both (Wu, 2000).

Going further, urbanists need to develop new types of urban forms and configurations so that emerging BRI-developments can be more than industrial and logistic hubs but become qualitative environments of a new kind. Crucial here would be to understand and respect the local context, mixing different scales of urban developments according to function, local user patterns and landscape.

3.4 System for spatial development of BRI

As mentioned earlier the current urban design and planning research body contains various topics useful to the development of the BRI. Urban planning and design studies offer constructs, theories, frameworks and guidelines that can be applied to aid the development on various scales. However, the main problem of a mega-project like BRI, coordination, applies to theory as well. As spatial planning and design has the potential to support collaboration through space, it is especially important for the different theoretical constructs to be organized into a multi-scalar system.

Such a system needs to be more than an arrangement of abstract theories. The BRI is a complex enterprise aimed at collective profit. Therefore existing urban planning and design theories need to be applied on BRI case-studies (fitting precedents can be used as well), in order to pinpoint crucial aspects that need practical solutions.

Finally the system should aid urban designers and planners to balance between global and local aspects in planning and design and provide tools to adjust urban development real-time.

3. Conclusion

The BRI is a geopolitical, infrastructural mega-project designed to promote politico-economic collaboration and improve connectivity across the Eurasian continent. The BRI is Chinese main foreign strategy to reach out to the West, Middle-East and Africa, strengthen its own position in Eurasia, and support its economy by providing loans and services abroad. The BRI has a wide range of politico-economic, socio-cultural and physical instruments to reach the five goals; financial integration, unimpeded trade, policy coordination, connectivity, people-to-people bonds – all of which contribute to a new kind of win-win collaboration.

In order to decompose the complexity of BRI and study its spatial effects on the local scale, I proposed the case of Khorgos Gateway, for its infrastructure driven transformation of previously remote and thinly populated border region.

This case illustrates my critique on the current infrastructure oriented approach and with it the subservient role of urban environments in BRI-driven developments. Taking a perhaps a naïve or idealistic position I argue that the BRI bears the potential to carry a change toward a more mindful and inclusive urbanization, and that the failure or success of the initiative depends for a big part on the quality of places that the BRI will generate.

Biggest challenges for the BRI are border issues and coordination of developments across scales. These can effectively be addressed through urban planning and design. However, I believe that to effectively deal with the complexity of the BRI, the existing urban theories and recommendations need to be developed into a system adapted to the specifics of this mega-project. Developing such a system we need to focus on the balance between the global and the local and approach urban development as a real-time process, rather than a fixed result.

The role of urbanists in context of BRI becomes that of mediators between clients and users, governments and locals, infrastructure and settlements. Finally, I would like to emphasize the significance of culture in context of the BRI. The initiative that is focused on reaching across borders and improving people-to-people collaboration, fundamentally depends on its ability to interact with tangible and intangible specifics of the local contexts.

4 Further research recommendations

4.1 Research recommendations

This work was a first introduction of the BRI for urban planners and designers. In all its broadness and incompleteness this essay is a call for further research as I strongly believe that this topic deserves active discussion in urbanism studies. All topics I touched upon in my discussion would need more systematic and fundamental research. I would like to highlight 3 possible directions for further research:

- 1) As I advocated before more research is needed in order to develop theoretical frameworks and potentially a systematic approach that combines concepts about cross-border cooperation, polycentric development and participation. Research is needed to understand the planning and organizational culture(s) of the BRI. Given the broad geographical reach of the

initiative it's possible that several region-dependent option will come up.

- 2) Comparative studies between relevant precedents like the EU, will help identify which of the existing models and practices can be applied or adapted in case of the BRI. More cases for studies need to be selected across the BRI network. Kashgar is another recently developed SEZ and a Silk Route Heritage city, Gwadar port developments in Pakistan tie the land and sea routes of the BRI together. It would be interesting to see how the BRI interacts with local context there, compared to the case of Khorgos.
- 3) In order to rethink the current urbanization processes we need a better understanding of how to respectfully embed the global developments like infrastructure in the local context. Local culture play an important role in this issue but is a very new not yet well defined topic in urbanism and environmental psychology. Among the first results, are concepts like 'place identity' and 'sense of place' (Jorgensen & Stedman, 2001). More practical is the emerging place-making movement (PPS, 2010). Currently it is developed for the neighborhood scale, but through a combination of theoretical and case-studies, the core concepts can be up scaled and applied in the BRI.

4.2 Thesis project

In my thesis project I will continue studying the Khorgos Gateway, focusing on the cultural aspect which I also mentioned in my recommendations. The International Centre for Border Cooperation and its direct surrounding on the Kazakhstan side will serve as research and design site, upon which I will use the concepts of place making in order to design an alternative transition between the border and its surrounding. I aim to create a vibrant environment that can facilitate interactions between local and international users.

5 Reflection

This essay came as a result of a long and iterative process of (re)framing the BRI as a set of problems relevant in urbanism. It took a while to realize that before researching applications of specific urban planning and design methods and theories on BRI, a more general exploration was needed to provide comprehension and overview. Zooming in and out I ended up with a lot more information than I could include in this short essay, making the task of organizing it the more challenging. Nevertheless this has helped me to grasp the wide scope of the problem and mindfully choose on which of the specific problems to focus from now on.

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Background literature

*'The idea of Eurasia is once again the subject of geopolitics'
providing a global perspective on BRI.*

*'Apartheid with Chinese characteristics',
describing the political situation in Xinjiang Province*

*'The roaming empire',
illustrating the lifestyle of the roaming generation referred
to as 'the nomads of globalisation in this thesis.*

The first article puts the BRI in global perspective illustrating the significance of the development and the scale of impact it may have.

The following two articles are a contrasting pair of stories about people's life. 'The roaming empire' shows the inner conflict of the current generation as consequence of globalisation. Becoming a 'nomad of globalisation' the freedom of being a world citizen takes as a price the belonging to a home.

The second article illustrates an opposite situation, the life of constrained freedom, where the roaming lifestyle is an unwanted luxury, a dimension which existence will be denied for the sake of survival.

This contrast embodies for me the responsibility that comes with urban planning and design.

Banyan

The idea of Eurasia is once again the subject of geopolitics

The emerging order is one that Marco Polo would recognise

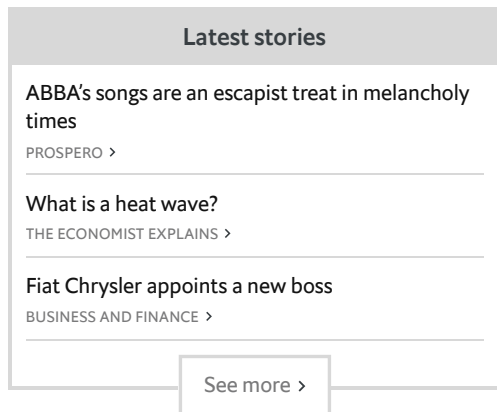


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Jul 19th 2018

OH, EAST is East, and West is West, and never the twain shall meet. Perhaps that was true when an Iron Curtain ran down the middle of Europe, and Mao Zedong's China had turned disastrously inward. But now? This week leaders of the European Union and China met at a summit in Beijing to praise "EU-China connectivity". It is more than an empty phrase, even if European leaders, distracted by political and migrant crises at home, are less clear-sighted about its implications than are their Chinese counterparts. China has hugely ambitious plans to connect the commercial worlds of Europe and East Asia via infrastructure links that will knit the vast—and till now seemingly inchoate—land mass of Eurasia together. But Chinese efforts are only the most notable of many modernising impulses that are beginning to mesh Eurasia into something resembling a whole.

In a stack of recent books and papers, a growing number of strategists argue that the emergence of a cohering Eurasia is the key feature of a new world order that is taking shape. In truth, Eurasia never went away. Nor are musings on its significance especially new. Over a century ago Halford Mackinder, a founding father of geopolitics, placed Eurasia at the centre of world affairs. In his so-called “heartland theory”, he reasoned that whoever controlled the geographic core of Eurasia could rule the world.



The most original case for Eurasia having new meaning is made by Robert Kaplan in his new book, “The Return of Marco Polo’s World”. Mr Kaplan, an American journalist and strategist, has a long fascination with how geography shapes destiny. He argues that Eurasia’s new connectivity in roads, railways, gas pipelines and fibre-optic cables means that the old regional categorisations of, say, Central, East and

South Asia have ever less meaning as geopolitical concepts. The primacy of nation-states in those regions is also fading. Rather, the interplay of globalisation, technology and geography is leading “the Eurasian supercontinent to become...one fluid and comprehensible unit. Eurasia simply has meaning in the way that it didn’t used to.”

So far, so relatively uncontentious. But Mr Kaplan draws a couple of striking conclusions. First, he argues that, in a land mass historically dominated by China, Russia, Persia (modern-day Iran) and Turkey, a half-hidden tradition of empire is striking back. Nowhere is that more evident than with China and its Belt and Road Initiative, which uses infrastructure as a weapon for neocolonial domination. But other historical empires are attempting to make themselves felt too—think of Russia with its Eurasian Economic Union. These new empires don’t call themselves such. But they act with an imperial mindset.

It is a world that Marco Polo, who travelled from Europe to Mongol-ruled China in the 13th century, would recognise—as Mr Kaplan’s title implies. China’s grand strategy today acknowledges that trade is a better weapon than the sword—just like the *Pax Mongolica* that then held sway across multicultural Eurasia.

Now, as then, risks live side by side with the potential for wealth creation. Connectivity, Mr Kaplan says, “has wrought a more claustrophobic and ferociously contested world.” The communications revolution denies empires an unambiguous upper hand. At one level, it allows sovereignties to multiply, as city-states thrive—think of Singapore or Dubai, like Bukhara in Marco Polo’s day. And identities hew not only to empire, but to locality, religion and clan. There is a dark side to this. Islamist mayhem in Afghanistan and Pakistan, as well as the hounding of Rohingyas in Myanmar, attest to it. When globalisation weakens religion and culture, these get reinvented “in more severe, monochromatic and ideological form”—not so much the clash of civilisations as the clash of artificially reconstructed ones.

Eurasia, Mr Kaplan argues, will prove a curious mix of connectivity and anarchy. The Chinese and Russian empires are themselves vulnerable to groups empowered by communications. Crises in the capital could lead to “ungovernability in the far-flung provinces.” Meanwhile, China’s belt-and-road strategy could cause trouble at home. It is intended to make what Mr Kaplan calls “an end run” around China’s restive western province of Xinjiang. There, modernity has forced the Muslim Uighurs into economic competition with incoming Han Chinese in ways that threaten the survival of the Uighurs’ identity. It has led to Uighur radicalisation. The Chinese response to it has been to run Xinjiang as a police state of utmost brutality. It is hard to square that with the open ideals of China’s plans for intercontinental links.

A new medievalism?

Such ideals may be tested elsewhere, too. China’s \$46bn investment in roads, railways and a port to connect its heartlands to the Indian Ocean through Pakistan could generate enough local growth to calm the long-running insurgencies along Pakistan’s frontiers. Done wrong, it could pour fuel on Pakistani fires, leaving Chinese plans in ruins.

Mr Kaplan’s book depicts a new medievalism—a world in which empires, not nation-states hold, sway, and where local identities and grievances breed instability and unrest. But it is possible to base judgment of Eurasia’s future too closely on the crescent of war, strife and police-state thuggery that runs from the Middle East through to western China. And, as Parag Khanna of the Lee Kuan Yew School of Public Policy in Singapore points out, the leaders of Eurasia’s three most

populous democracies, India, Indonesia and the Philippines, are “doers” out to reverse, however imperfectly, decades of stagnation and corruption.

Even in Eurasian countries that are undemocratic, a desire for economic growth acts as a moderating force in their relations with one another. Their pursuit of regional trade pacts points to their priorities. Geopolitical faultlines persist, such as between the two most populous countries, India and China, and intra-Eurasian war remains a risk. But it is not the super-region’s destiny.

This article appeared in the Asia section of the print edition under the headline “Only connect”



As buying a house becomes harder and remote working simpler, should we remain wedded to the idea of settling down? Jonathan Beckman meets the people who hope to find a home wherever they wander

JONATHAN BECKMAN



At cocktail hour on a mild October evening, as thousands of Londoners are wadded face to armpit on their tube journeys home, half a dozen residents of a handsome, brown-brick townhouse in Chelsea have gathered in the basement kitchen. Jonny Sywulak, a 34-year-old software engineer and former bartender, is standing behind a balustrade of vodka bottles, demonstrating how to concoct a Bloody Mary. Each glass is served with an elaborate garnish – a slice of lime, a slice of lemon, an olive, a nub of blue cheese and a shrimp – that slumps against the rim like a half-felled totem pole.

“I’m just following instructions here,” says Isa Landaeta, the house’s community manager. “I’ve never made a garnish like this before. Also, do olives really taste good with shrimp?”

Though most of the participants barely know each other, the atmosphere is congenial and relaxed. Amira Yousif,

for a free pudding and has stayed for the spectacle. She sips a taste of cocktail from a teaspoon.

"Can you feel the baby yet?" asks Hannah Letten, a sprightly, ginger-haired student. "Do you feel a little pod inside you?"

"It's like asking can you feel your heart or can you feel your liver," says Amira. "It's just nothing at the moment."

Welcome to the modern commune: wipe your feet before you enter. The inhabitants of this 34-bedroom house live and eat alongside each other, laugh and get drunk together, play Cards against Humanity, a game of post-ironic bad taste, as the evening hubbub dies down. Some stay for weeks, some for months, others indefinitely, uncertain and often unconcerned about where they will move to next. As well as three Englishmen, the cocktail class includes an American, a Canadian, a Venezuelan and an Australian. They are unencumbered by family responsibilities and have no place they call home. Most of them would happily function anywhere in the world with a robust internet connection.

For hundreds of years, communal living has been an escape route from mainstream society. The commune is a utopian experiment where hierarchies are broken down and human relations re-imagined. The ashram dosed up visitors with spiritual infusions. The Jewish state, a project many considered impossibly idealistic almost until the moment it was created, was built on the back of another type of collective, the kibbutz. The most drastic social experiments of the 20th century were conducted by people who called themselves communists. Apocalyptic believers and countercultural dreamers congregated in communes to distance themselves from a world they considered unredeemed and soulless.



musicians, lawyers and venture capitalists live there. Some people go out to work each day, others labour away with monastic dedication in the house's co-working space. The kitchen is stocked with the essentials of metropolitan sophisticates: Maldon sea salt, Aleppo pepper, preserved lemons. Blackboards on the doors of each bedroom are scrawled with the names of the occupants (one reads, enigmatically, "The Pope's room").

The property is one of four operated by Roam, a company that describes itself as a "co-living and co-working community". It manages similar-sized complexes in Miami, Tokyo and Ubud in Bali. They are designed for people who can work anywhere and want to live everywhere. In London, members pay £600 (\$850) a week and can move out with seven days' notice. They are able to flit between properties with ease, finding at each of them a community of fellow travellers. These are not fugitives from the mainstream but waist deep in it, even representative of it. They are the outriders of globalisation and the beneficiaries of flexible working. For them, home is not a castle or even an assemblage of rooms, but a state of mind.

The idea of home as the preserve of the nuclear family is a product of modernity. Until the 16th century, most urbanites in Europe lived in the same building that they worked in. The main room would act as a shop or atelier during the day (latterly, many houses acquired a second storey for the household alone). Everyone would sleep cheek by jowl, including servants, apprentices and, in large tracts of the continent, members of the extended family. The homes of the rich bustled with traffic. Philippe Ariès, a French historian, describes the "grande maison", with its permanent staff of retainers, confessors and secretaries, thronging with "friends, clients, relatives and protégés". Privacy in the modern sense barely existed.

Homes were permeable and extended beyond the confines of a single building. Most people were born, raised, worked and died in the same parish. They were enmeshed in the lives of their neighbours by barter and trade, the intermarriage of their children and participation in religious services and rituals. Home was the point at which

two meanings of 'home' – the house in which we live and the place to which we feel attached – are now so entwined as to be almost indistinguishable.

In the 17th and 18th centuries a division emerged between personal space, such as bedrooms and drawing rooms, and a public reception room (this development occurred earlier in more advanced economies like England and the Netherlands). Work was evicted from the home. During the Industrial Revolution, manufacturing moved into purpose-built factories. Technological innovations such as the railroad and telegraph enabled businesses to operate nationally, eventually internationally. Their growth required a dedicated space in which teams of managers could co-ordinate affairs. Thus the modern office was born. Ancillary professions that supported business – law, banking, accountancy, marketing – needed offices too. Meanwhile, the expansion of the state created a bureaucracy of its own. Services such as education and health care, which had previously been provided by sole practitioners at home, were now offered on a national scale on special campuses built to educate and heal hundreds of thousands of citizens.

The location of your job determined where you lived. Home was no longer synonymous with birthplace – it needed to be established. According to the Oxford English Dictionary, the first use of "home town" in Britain to mean "the town of one's birth, early or permanent residence" occurred in 1824, during an unprecedented wave of mass migration to cities, as people sought work in factories. Previously, there had been little need for the concept: the presumption was that the town where you were born was the only one you would ever have.

The home clammed up, holding at a distance everyone bar the nuclear family. The notion that an Englishman's house is his castle began life as a legal argument in favour of the right to kill intruders. But it came to express the belief that a person's liberty, his essential character, had its freest rein in their own home. A mutually beneficial relationship emerged between the workplace and the house. The purpose of work was to acquire, maintain and embellish the latter. Modern consumerism was directed towards the

Certain forms of communal living had evident benefits. The boarding school, the barracks and the asylum stripped away individuality in order to instil obedience. And collective housing persisted informally: in the early 20th century, for example, 10% of people in San Francisco lived in boarding houses. But the nuclear family absorbed so much emotional and financial investment that alternative configurations were often regarded with suspicion.

Modern communes emerged in defiance of middle-class values, erasing the distinction between public and private. The counterculture turned privacy inside out by advocating nudity and free love. During its heyday in the 1960s and 1970s, an estimated 750,000 people in America lived in around 50,000 communes.

Over the past 50 years the notion of the home has mutated again as more people started to live alone, often by choice. According to American census data, 28% of households in 2014 comprised a single person, up from 13% in 1960, a trend that is replicated in many countries. Society has become more atomised and many of the institutions of civil society that once nourished community life have shrivelled through lack of participation. Sociologist Robert Putnam noted in “Bowling Alone” that a decline in social connections has coincided with a rise in depression and suicide.

Living arrangements are now in flux once again. As most professional activities have migrated onto the computer, it has become less important than ever before to live close to one’s work. According to a 2016 Gallup poll, nearly half of all employed Americans work remotely at least some of the time, up from 9% in 1995; a fifth of these flexible employees never go into the office.

Home ownership is already out of reach for many young professionals in major cities. Even those who can afford to buy often end up with a cramped compromise. The traditional home is becoming unattainable, but it is also becoming unnecessary for a large number of white-collar workers. If the home no longer needs to exist in a

On his second morning in Ubud, Joe Tolan showers in a waterfall, because if you're staying in paradise, you ought to make full use of the facilities. The drive takes an hour, through the lush Balinese countryside. Sitting next to Tolan, an IT consultant in his mid-30s dipping his toe into nomadic life, is Julian Schmidli, a Swiss journalist. Tolan has breakfasted at Alchemy, a totally raw, totally vegan restaurant that refuses even to do toast. Though it is beloved of the town's many yoga posers and spiritual questers, Tolan's stomach feels short changed.

"If you have a vegan breakfast, you're hungry 20 minutes later," he says. He pulls out a baguette from his bag, takes a bite and a shimmer of bliss sweeps across his face. "Oh sweet carbs, how I've missed you!"

"They have this cheeseburger," says Schmidli. "The cheese is made out of cashew in a dried paste. Beetroot burger. The bread is lettuce."

"That's the principle of alchemy," Tolan says. "They take the worst food they can find and they somehow turn it into money."

Moss lubricates the flagstones that lead down to the waterfall. During the descent, butterflies in yellow hi-vis blink around them. Through the foliage, a cocoa-coloured rock face, rucked and polished by the cascade of water, unveils itself. Tolan strips off, tip-toes into the pool and lets the hammer of falling water knock him awake.

Bali is the cradle of modern nomadism. Since the 1960s, hippies and artists have found sanctuary in Ubud, the island's religious centre. "Eat Pray Love", Elizabeth Gilbert's bestselling memoir of her mid-life search for spiritual and romantic satisfaction, reached its nirvanic climax in the town. After its publication in 2006, Ubud's yoga scene became a draw for those looking for bliss. At the same time a different class of migrant arrived in Bali – the digital nomad, who shipped up surfboard under one arm, laptop under the other. Young, penniless and in need only of a Wi-Fi signal to eke out a living under the tropical sun.

to mind. I'm a 23-year-old techie who's going to crush it. I've got an Instagram account and I'm going to tell you how to live the good, free life... And I'm 22 and I actually don't know shit, but I'm going to put you in my funnel and I'm going to crush it," says Steve Munroe, the co-founder of Hubud, a co-working space that attracts entrepreneurs to Bali from across the world.

In the five years since Hubud opened, Munroe has seen the emergence of a new kind of nomad – one who is older, more experienced and determined to shape her own life. The median age of Hubud's users is now 33 and many come with families. "A lot of them are in this transitional part of their life," he says. They want to start afresh or recalibrate their work-life balance. In Ubud, they can live cheaply, with a cook and cleaner, which frees up time to devote to fledgling businesses. Those still holding down remote jobs with companies in Europe or America find long stretches of the day blissfully uninterrupted by the chirrup of email, as the rest of the world lies asleep. Ubud's spiritual pick-me-ups offer sustenance to nomads whose computer is their most constant companion. "The tech industry is so volatile and unlimited," Schmidli says. "That generates a lot of anxiety."

Unlike travellers, modern nomads are not in perpetual motion. They may stay in the same place for months, even years. What marks them out is their unwillingness to put down roots. Whenever they want, they can move on with little effort. Pieter Levels, who runs Nomad List, a website that ranks the world's most nomad-compatible cities, estimates that there are now hundreds of thousands of self-identifying digital nomads and a few million people living a "location-independent lifestyle" (as the jargon goes), though calculating the number of people is tricky, given the loose definition of the term and fluidity of the lifestyle.

Tolan doesn't look like a typical tie-dyed Ubudian. A beefy man with a New Jersey accent, he dresses like a bro abroad in a vest, cargo pants and thongs. His manner is abrupt, which sometimes makes it hard to judge whether he is making a joke at someone else's expense or his own. He worked in Los Angeles before his business collapsed, a disaster on which he reflects phlegmatically: "Everyone

the company had paid for those – but he also came to the conclusion that his life had been materialistic and that success had narrowed his horizons. Tolan broke up with his girlfriend, who he felt was trying to cuff him, and departed for Ubud in search of a satisfying ratio of labour to excitement. His friends have started running a book on ways he might die.

What were the options? “Mostly disease. Malaria, typhoid. I might accidentally jump into a volcano when it erupts. Eaten by a shark. Death by falling off a bridge – provided it was high enough.”

The smart money was on a crash, after Tolan involuntarily dismounted twice within a day of acquiring a moped.

With his career at a crossroads, Tolan felt an urge to change more than just his job. But he was conscious of the magnitude of the decision and knew he was too old to go it alone: travel can be liberating but it can also be isolating. Roam offered Tolan a soft landing with a pop-up circle of new friends. Within a couple days of arriving, he had secured an invitation to Singapore for Thanksgiving.

Among other things, co-living spaces are an attempt to solve the problem of nomadic dislocation. They try to conjure feelings more often associated with that place we call home – contentment, belonging and assurance – through companionship alone. If the experiment proves successful, the commune, once the freakish sibling of modern society, may finally have found its place.

No single word adequately describes co-living spaces. Institution? Too psychiatric. Facility? Too CIA. The novelty of such living arrangements is emphasised by the language void. But it is a phenomenon that has appeal across the globe, from San Diego to Copenhagen to Singapore. Brands such as Hmlet and Lyf operate in Asia. In the London suburbs, outfits such as the Collective and Tipi have sprung up. These projects generally target professionals at the start of their careers, often recent arrivals to the city who cannot afford surging rents, or who want to avoid rackety private landlords and oddball housemates. Roam has adapted the co-living

Bruno Haid, the co-founder of Roam, has a top-knot on his head, a bottom-knot on his beard and the polite stoop of a very tall man. In his previous career he built search engines and was first drawn to communal living after converting a dilapidated hotel in San Francisco. A tour of the house in Chelsea immediately reveals that a computer programmer's obsessions with user experience and download speeds have saturated his thinking about design. Super Mario is the guiding light. "Nobody ever read the manual for Super Mario," says Haid. "The first couple of levels were so well designed that you could automatically learn the game as you played it. We try to do the same here." There are no doors on the kitchen cabinets, because "if you live in a kitchen for 20 years, you want to tidy everything up. But if you're just here for three weeks, you don't want to spend three weeks figuring out where the plates are." The microwave has one button rather than 17 settings. Every appliance ought to be instantly comprehensible; explanatory signs are an admission of failure.

At each of its properties, Roam employs a community manager, typically a young woman with full-beam enthusiasm, who arranges events such as trips to art galleries and communal dinners, and fields complaints about temperamental fire alarms and dysfunctional plumbing. Practically everyone I speak to during my time in London, Miami and Bali is unfailingly enthusiastic about the community, even the coy and timid who were initially sceptical. Co-living turns out to be perfect for many introverts, who don't want to live alone but blench at the thought of imposing themselves on complete strangers. They cherish company when they arrive somewhere new, but would prefer that it emerge from the incremental accumulation of passing encounters, giving them control over the pace at which they open up to others. Roam offers opportunities to join in but does not hector members to take part in organised fun.

Subtle nudges are not lost on the guests: a couple of them note that the absence of desks, chairs and TVs in the bedrooms encourages them to migrate to communal areas. But this causes little resentment. At Roam Chelsea, Amira

run a drag race, a kind of Miss America contest for drag queens. She's staying here only because her husband booked them in while their house was being redecorated. "I didn't think I would enjoy community living," she says. During her first week, she walked into the kitchen during a cookery class and was so intimidated that she grabbed a piece of bread and scuttled back to her room. Now, she greets everyone with hugs and laughter. "There's a common denominator to everyone I spoke to. Everyone thought they'd never do this but actually they've enjoyed it."

In the summer-camp atmosphere, bed-hopping abounds, but romance and enduring friendships are harder to sustain. One old-timer says that "you form close relationships with people and then they go and it's terribly hard. You emotionally shut down after a bit because you want to protect yourself. It sucks with people leaving you the whole time."

Co-living and co-working spaces monetise an often overlooked – but much desired – form of connection between people who are neither friends nor family nor colleagues. They sell the hum of human life itself. The silence of loneliness howls, but co-living diffuses this roar in a babble of neighbourly voices. As new forms of life emerge, older ones adapt. Some hotel chains have begun to provide communal options to relieve the solitariness of business travel. In America, Europe and the Middle East, Marriott now offers multi-person apartments and organises mixers. In Dubai the Tryp by Wyndham has replaced its business centre with a co-working space.



Online social networks initially promised constant company but in practice they often underscore distance (how many Facebook “friends” do you see even once a year?). They transform conversation into broadcast and are navigated by individuals in communion with a screen. Co-living, by contrast, turns out to be a genuinely social network – in 3D with surround sound.

This is a long way from the communes of the 1960s and 1970s, which combined “maximum self-actualisation and individuality with maximum co-operation and commitment to the welfare of others”, according to Judson Jerome, who was both a participant in and sociologist of the movement. In the commune’s new incarnation, privacy endures and participation is optional. You

community becomes a utility, much like electricity or water, to be switched on or off as needed. Yet the shallowness of relationships can also be a strength. Communes often foundered because members expected a charismatic leader or radical social reconfiguration to transform their lives. The stakes were so high that when they were disappointed, or disputes arose over the commune's direction, factions splintered off. Yet the emancipatory promise of these older communities finds a utopian echo in the marketing of many co-living providers now. Hmlet, which operates properties in Singapore and Tokyo, solemnly affirms that it "amplifies creativity and empowers our members".

Like many features of the modern world, co-living's latest incarnation grew out of Silicon Valley. In recent years, San Francisco has seen an outbreak of hacker hostels: houses packed tight with wannabe tech trillionaires waiting for their startups to pay out or get snapped up. These tended to be scuzzy, laddy and have an explicit emphasis on networking (in both senses of the word), aspects that more upmarket co-living providers have been eager to distance themselves from.

Co-living seeks inspiration from modern technology in another way too. Until recently, consumerism meant accumulation. Manufacturers produced tangible commodities. When customers bought them, they were physically transferred from one place to another. The home acted as a repository for these goods. Today, many of the world's highest-profile companies are not selling things – they are offering platforms in a virtual space, which enable easy access to services without the cost and storage requirement of ownership. For example, cloud computing obviates the purchase of expensive processors and equipment. Ride-hailing apps like Uber make the expense and anxiety of maintaining a car redundant for many. Such platforms also allow people to sample a previously unimaginable range of opportunities. Music-streaming services such as Spotify let us listen to most of the music ever recorded – far more than the average person could possibly buy.

Haid sees Roam as part of a trend that prioritises experiences over acquisition. It is a platform that will

needing to own even one. He has grand – some might say grandiose – plans for the company, envisaging a network of 10,000 Roams in which one might spend an entire lifetime. In each you would receive a guaranteed standard of accommodation and the welcoming embrace of a community. His thrilling vision is still a long way from being realised: Roam plans to open ten more sites in 2018 (though it had a similar target in 2017 and failed to reach it). With the addition of major cities such as Shanghai, Los Angeles and New York, Haid believes the network effect will become apparent.

It's questionable how many people want to see out their days as nomads. The atavistic yearning for a place of one's own still burns strong in countless savings accounts. A paid-off mortgage guarantees a roof over one's head in old age. Raising and educating a family on the hoof adds a level of complexity and bureaucracy at which most parents would balk. Many of the residents at Roam say they can imagine living transiently for a few years but not for ever. Even Alysia Hamilton, Roam's outgoing head of community, admits that "we haven't figured out if we're a permanent solution or an in-between solution". But co-living is valuable at certain moments – the launch into the workplace, the career change or break, retirement – when people have fewer commitments, making the rootless life simpler and more appealing. Co-living cushions the vertiginous leap away from a circle of acquaintances. Today's nomads don't travel in tribes; they find each other at every watering hole.

The Pope of Roam turns out to be a bloke called Mike. No one has stayed in the London house longer than Mike Price. A lean, shaven-headed Irishman with the panel-beaten nose of a retired rugby player (which is what, in fact, he is), Price's reason for staying at Roam reflects a typical combination of pragmatism and idealism. He used to live around the corner but the admin that came with maintaining his own flat irked him: "I didn't want bills and all that bullshit." He owns a number of gyms in London and Dublin (presumably he has minions to deal with that paperwork) and every time he travels for work he checks out, then checks in again on his return. Even when he's gone, he says

Is he happy living out of a bag? “Yes,” he says, “Ever since I saw that movie ‘Heat’. Pacino looks at De Niro and goes, ‘I don’t have anything in my life that I can’t put down in 60 seconds and walk away from.’ I wish I could say that is the truth. But it’s not. I’ve got a family – a couple of brothers – and businesses. But I like the idea of thinking I can just drop everything and walk away.” Other nomads express similar sentiments, feeling they let themselves become prisoners of their own possessions. When they speak about their decisions to dispose of a wine collection or their grandmother’s dinner service, their voices rise with fervour.

As Price talks, the noises off grow louder. The antiquated plumbing system, which had been acting up all day, had finally burst. One guest is flooded out of his bedroom and the water needs turning off. Had this happened in a hotel, there would have been remonstrations over the inadequate service, but misfortune reveals the resilience of the residents’ camaraderie. A posse sets off to a nearby supermarket to buy bottled water for drinking and toilet-flushing. On arrival, another problem presents itself: the staff would not lend trollies to wheel back 60 bottles, even though they are implored to supervise the caravan.

As they face a knuckle-whitening drag home, a thin man with a Middle Eastern complexion, who has been queuing to buy cigarettes, offers to transport them in his car.

“Thank you so much,” says Isa Landaeta, the community manager, relief glistening in her eyes.

“See the way we come together,” Price says, with something like pride. “This is community.” ■

Jonathan Beckman was a guest of Roam in London, Miami and Bali

Jonathan Beckman is deputy editor of *1843*

ILLUSTRATIONS **ADAM SIMPSON**

Apartheid with Chinese characteristics

China has turned Xinjiang into a police state like no other

Totalitarian determination and modern technology have produced a massive abuse of human rights



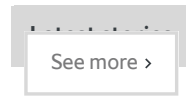
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May 31st 2018 | HOTAN, XINJIANG PROVINCE

“THE prophet Sulayman approached his son and said to him, ‘I have received a message from God. I want you to circle the Earth and see if there are more people who are alive in spirit or more people who are dead in spirit.’ After a period the son returned and said, ‘Father I went to many places and everywhere I went I saw more people who were dead than those who were alive.’”

Hasan shared that message on a WeChat social-messaging group in 2015, when he was 23. Born in Yarkand, a town in southern Xinjiang, Hasan had moved to the provincial capital, Urumqi, to sell jade and shoes and to learn more about Islam. He described himself to Darren Byler, an anthropologist from the University of

Washington, as a Sufi wanderer, a pious man with a wife and small daughter, who prayed five times a day and disapproved of dancing and immodesty.



But in January 2015 the provincial government was demanding that everyone in Urumqi return to their native home to get a new identity card. “I am being forced to go back,” Hasan complained to Mr Byler. “The Yarkand police are calling me every day. They are making my parents call me and tell me the same thing.” Eventually, he and his family boarded a bus for the 20-hour journey home. It was hit by a truck. Hasan’s wife and daughter were killed. He was hospitalised. “It was the will of Allah,” he said.

Hasan hoped the authorities would allow him to return to Urumqi because of his injuries. No chance. Having lost wife, child and livelihood, Hasan lost his liberty, too. A fortnight after his accident, he was sent to a re-education camp for an indefinite period. There, for all his relatives know, he remains.

Hasan is one of hundreds of thousands of Uighurs, a Turkic-language people, who have disappeared in Xinjiang, China’s north-western province. It is an empty, far-flung place; Hasan’s home town of Yarkand is as close to Baghdad as it is to Beijing. It is also a crucial one. The region is China’s biggest domestic producer of oil and gas, and much of the fuel imported from Central Asia and Russia passes through on its way to the industries of the east coast. It is now a vital link in the Belt and Road Initiative, a foreign policy which aims to bind the Middle East and Europe to China with ties of infrastructure, investment and trade.

But on top of that it is the home of the Uighurs, the largest Muslim group in the country, and ethnically quite distinct from the Han Chinese. A recent history of Uighur unrest—in particular bloody inter-ethnic violence in Urumqi in 2009 that followed the murder of Uighurs elsewhere in China—and subsequent terrorism have sent the government’s repressive tendencies into overdrive. Under a new party boss, Chen Quanguo, appointed in 2016, the provincial government has vastly increased the money and effort it puts into controlling the activities and patrolling the beliefs of the Uighur population. Its regime is racist, uncaring and totalitarian, in the sense of aiming to affect every aspect of people’s lives. It has created a fully-fledged police state. And it is committing some of the most extensive, and neglected, human-rights violations in the world.

The not-quite-Gulag archipelago

The government is building hundreds or thousands of unacknowledged re-education camps to which Uighurs can be sent for any reason or for none. In some of them day-to-day conditions do not appear to be physically abusive as much as creepy. One released prisoner has said he was not permitted to eat until he had thanked Xi Jinping, the Chinese president, and the Communist Party. But there have been reports of torture at others. In January, 82-year-old Muhammad Salih Hajim, a respected religious scholar, died in detention in Urumqi.

Kashgar, the largest Uighur city, has four camps, of which the largest is in Number 5 Middle School. A local security chief said in 2017 that “approximately 120,000” people were being held in the city. In Korla, in the middle of the province, a security official recently said the camps are so full that officials in them are begging the police to stop bringing people.

As a result, more and more camps are being built: the re-education archipelago is adding islands even faster than the South China Sea. Adrian Zenz of the European School of Culture and Theology in Kortal, Germany, has looked at procurement contracts for 73 re-education camps. He found their total cost to have been 682m yuan (\$108m), almost all spent since April 2017. Records from Akto, a county near the border with Kyrgyzstan, say it spent 9.6% of its budget on security (including camps) in 2017. In 2016 spending on security in the province was five times what it had been in 2007. By the end of 2017 it was ten times that: 59bn yuan.

For all this activity, the government has not officially confirmed that the camps exist. They are not governed by any judicial process; detentions are on the orders of the police or party officials, not the verdict of a court. A woman working as an undertaker was imprisoned for washing bodies according to Islamic custom. Thirty residents of Ili, a town near the Kazakh border, were detained “because they were suspected of wanting to travel abroad,” according to the local security chief. Other offences have included holding strong religious views, allowing others to preach religion, asking where one’s relatives are and failing to recite the national anthem in Chinese.



A significant chunk of the total Uighur population is interned in this way. If the rate of detention in Kashgar applied to the province as a whole, 5% of the Uighur population of 10m would be detained. Other evidence suggests that this is quite

possible. In February Radio Free Asia (RFA), a broadcaster financed by an independent agency of the American government, cold-called 11 families at random in Araltobe, in the north of the province, far from the Uighurs' heartland. Six said family members had been sent to camps. In a village later visited by Agence France Presse in Qaraqash county, near Hotan, a fifth of adults had been detained over four months.

Maya Wang of Human Rights Watch, an advocacy group, reckons the overall number detained may be 800,000. Timothy Grose, a professor at Rose-Hulman University in Indiana, puts the total between 500,000 and 1m, which would imply that something like a sixth to a third of young and middle-aged Uighur men are being detained, or have been at some point in the past year.

The Chinese government argues that harsh measures are needed to prevent violence associated with Uighur separatism. In 2013 a Uighur suicide-driver crashed his car into pedestrians in Tiananmen Square in Beijing. In 2014 a knife-wielding Uighur gang slaughtered 31 travellers at a train station in Kunming, Yunnan province, an incident some in China compared to the September 11th 2001 attacks on America. Unrest in Yarkand later that year led to a hundred deaths; an attack at a coal mine in Aksu killed 50 people. Kyrgyzstani authorities blamed Uighur terrorists for an attempt to blow up the Chinese embassy in Bishkek; Uighurs have been blamed for a bombing which killed 20 at a shrine in Bangkok popular with Chinese tourists.

There are worrying links, as the Chinese authorities are keen to point out, between Uighur separatism and global *jihād*, especially in the Uighur diaspora, which is based in Turkey. Chinese and Syrian officials say 1,500 Uighurs have fought with Islamic State (IS) or Jabhat al-Nusra (part of al-Qaeda) in Syria. A group called the Turkestan Islamic Party, which demands independence for Xinjiang, is banned under anti-terrorist laws in America and Europe. In 2016 a defector from IS provided a list of foreign recruits; 114 came from Xinjiang.

In the grid

But the system of repression in the province goes far beyond anything that would be justified by such proclivities and affiliations. In Hotan there is a new police station every 300 metres or so. They are called “convenience police stations”, as if they were shops—and in fact they do offer some consumer services, such as bottled water and phone recharging. The windowless stations, gunmetal grey, with

forbidding grilles on their doors, are part of a “grid-management system” like that which Mr Chen pioneered when he was party boss in Tibet from 2011 to 2016. The authorities divide each city into squares, with about 500 people. Every square has a police station that keeps tabs on the inhabitants. So, in rural areas, does every village.

At a large checkpoint on the edge of Hotan a policeman orders everyone off a bus. The passengers (all Uighur) take turns in a booth. Their identity cards are scanned, photographs and fingerprints of them are taken, newly installed iris-recognition technology peers into their eyes. Women must take off their headscarves. Three young Uighurs are told to turn on their smartphones and punch in the passwords. They give the phones to a policeman who puts the devices into a cradle that downloads their contents for later analysis. One woman shouts at a policeman that he is Uighur, why is he looking at her phone?

There can be four or five checkpoints every kilometre. Uighurs go through them many times a day. Shops and restaurants in Hotan have panic buttons with which to summon the police. The response time is one minute. Apparently because of the Kunming knife attack, knives and scissors are as hard to buy as a gun in Japan. In butchers and restaurants all over Xinjiang you will see kitchen knives chained to the wall, lest they be snatched up and used as weapons. In Aksu QR codes containing the owner’s identity-card information have to be engraved on every blade.

Remarkably, all shops and restaurants in Hotan must have a part-time policeman on duty. Thousands of shop assistants and waiters have been enrolled in the police to this end. Each is issued with a helmet, flak jacket and three-foot baton. They train in the afternoon. In the textile market these police officers sit in every booth and stall, selling things; their helmets and flak jackets, which are uncomfortable, are often doffed. A squad of full-time police walks through the market making sure security cameras are working and ordering shop assistants to put their helmets back on. Asked why they wear them, the assistants reply tersely “security”.

At the city’s railway station, travellers go through three rounds of bag checks before buying a ticket. On board, police walk up and down ordering Uighurs to open their luggage again. As the train pulls into Kashgar, it passes metal goods wagons. A toddler points at them shouting excitedly “Armoured car! Armoured car!” Paramilitary vehicles are more familiar to him than rolling stock.

Uniformed shop assistants, knife controls and “convenience police stations” are only the most visible elements of the police state. The province has an equally extensive if less visible regime that uses yet more manpower and a great deal of technology to create total surveillance.

Improving lives, winning hearts

Under a system called *fanghuiju*, teams of half a dozen—composed of policemen or local officials and always including one Uighur speaker, which almost always means a Uighur—go from house to house compiling dossiers of personal information. *Fanghuiju* is short for “researching people’s conditions, improving people’s lives, winning people’s hearts”. But the party refers to the work as “eradicating tumours”. The teams—over 10,000 in rural areas in 2017—report on “extremist” behaviour such as not drinking alcohol, fasting during Ramadan and sporting long beards. They report back on the presence of “undesirable” items, such as Korans, or attitudes—such as an “ideological situation” that is not in wholehearted support of the party.

Since the spring of 2017, the information has been used to rank citizens’ “trustworthiness” using various criteria. People are deemed trustworthy, average or untrustworthy depending on how they fit into the following categories: 15 to 55 years old (ie, of military age); Uighur (the catalogue is explicitly racist: people are suspected merely on account of their ethnicity); unemployed; have religious knowledge; pray five times a day (freedom of worship is guaranteed by China’s constitution); have a passport; have visited one of 26 countries; have ever overstayed a visa; have family members in a foreign country (there are at least 10,000 Uighurs in Turkey); and home school their children. Being labelled “untrustworthy” can lead to a camp.



The watchful and the watched

To complete the panorama of human surveillance, the government has a programme called “becoming kin” in which local families (mostly Uighur) “adopt” officials (mostly Han). The official visits his or her adoptive family regularly, lives with it for short periods, gives the children presents and teaches the household Mandarin. He also verifies information collected by *fanghuiju* teams. The programme appears to be immense. According to an official report in 2018, 1.1m officials have been paired with 1.6m families. That means roughly half of Uighur households have had a Han-Chinese spy/indoctrinator assigned to them.

Such efforts map the province's ideological territory family by family; technology maps the population's activities street by street and phone by phone. In Hotan and Kashgar there are poles bearing perhaps eight or ten video cameras at intervals of 100-200 metres along every street; a far finer-grained surveillance net than in most Chinese cities. As well as watching pedestrians the cameras can read car number plates and correlate them with the face of the person driving. Only registered owners may drive cars; anyone else will be arrested, according to a public security official who accompanied this correspondent in Hotan. The cameras are equipped to work at night as well as by day.

Because the government sees what it calls "web cleansing" as necessary to prevent access to terrorist information, everyone in Xinjiang is supposed to have a spywear app on their mobile phone. Failing to install the app, which can identify people called, track online activity and record social-media use, is an offence. "Wi-Fi sniffers" in public places keep an eye, or nose, on all networked devices in range.

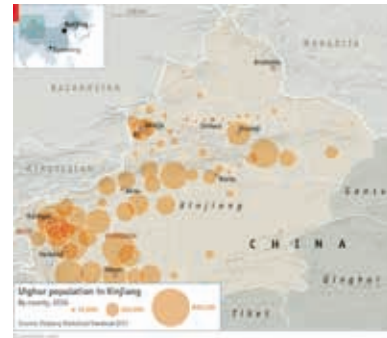
Next, the records associated with identity cards can contain biometric data including fingerprints, blood type and DNA information as well as the subject's detention record and "reliability status". The government collects a lot of this biometric material by stealth, under the guise of a public-health programme called "Physicals for All", which requires people to give blood samples. Local officials "demanded [we] participate in the physicals," one resident of Kashgar told Human Rights Watch, an NGO. "Not participating would have been seen as a problem..."

A system called the Integrated Joint Operations Platform (IJOP), first revealed by Human Rights Watch, uses machine-learning systems, information from cameras, smartphones, financial and family-planning records and even unusual electricity use to generate lists of suspects for detention. One official WeChat report said that verifying IJOP's lists was one of the main responsibilities of the local security committee. Even without high-tech surveillance, Xinjiang's police state is formidable. With it, it becomes terrifying.

In theory, the security system in Xinjiang applies to everyone equally. In practice it is as race-based as apartheid in South Africa was. The security apparatus is deployed in greatest force in the south-west, where around 80% of Uighurs live (see map). In a city like Shihezi, which is 95% Han, there are far fewer street checkpoints, if any, and a normal level of policing. Where there are checkpoints, Han Chinese are routinely waved through. Uighurs are always stopped.

The minarets torn down

Islam is a special target. In Hotan, the neighbourhood mosques have been closed, leaving a handful of large places of worship. Worshippers must register with the police before attending. At the entrance to the largest mosque in Kashgar, the Idh Kha—a famous place of pilgrimage—two policemen sit underneath a banner saying “Love the party, love the country”. Inside, a member of the mosque’s staff holds classes for local traders on how to be a good communist. In Urumqi the remaining mosques have had their minarets knocked down and their Islamic crescents torn off.



Some 29 Islamic names may no longer be given to children. In schools, Uighur-language instruction is vanishing—another of the trends which have markedly accelerated under Mr Chen. Dancing after prayers and specific Uighur wedding ceremonies and funerary rites are prohibited.

Unlike those of South Africa, the two main racial groups are well matched in size. According to the 2010 census, Uighurs account for 46% of the province’s population and Han Chinese 40% (the rest are smaller minorities such as Kazakhs and Kirgiz). But they live apart and see the land in distinct ways. Uighurs regard Xinjiang as theirs because they have lived in it for thousands of years. The Han Chinese regard it as theirs because they have built a modern economy in its deserts and mountains. They talk of bringing “modern culture” and “modern lifestyle” to the locals—by which they mean the culture and lifestyle of modern Han China.

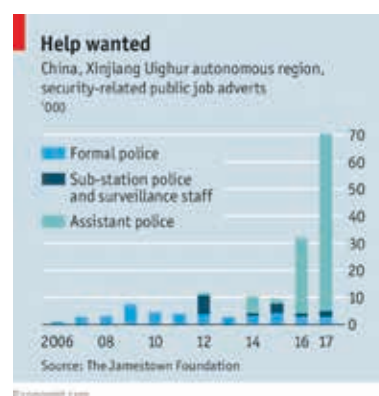
So how have the Han and Uighur reacted to the imposition of a police state? Yang Jiehun and Xiao Junduo are Han Chinese veterans of the trade in Hotan jade (which the Chinese hold to be the best in the world, notably in its very pale “mutton-fat” form). Asked about security, they give big smiles, a thumbs-up and say the past year’s crackdown has been “really well received”. “In terms of public security, Urumqi is the safest it has ever been,” says Mr Xiao, whose family came to the province in the 1950s, when the People’s Liberation Army and state-owned enterprises were reinforcing the border with the Soviet Union. “The Uighurs are being helped out of poverty,” he avers. “They understand and support the policy.”

Not all Han Chinese in Xinjiang are quite as enthusiastic. Tens of thousands came to the province fairly recently, mostly in the 1990s, to seek their fortunes as independent traders and business people, rather than being transferred there by state-owned companies or the army. They approve of better security but dislike the damage being done to the economy—for example, the way movement controls make it harder to employ Uighurs. So far, this ambivalence is not seriously weakening the support among the Han and, for the government in Beijing, that is all that matters. It sees Xinjiang mainly as a frontier. The Han are the principal guarantors of border security. If they are happy, so is the government.

The Uighur reaction is harder to judge; open criticism or talking to outsiders can land you in jail. The crackdown has been effective inasmuch as there have been no (known) Uighur protests or attacks since early 2017. It seems likely that many people are bowing before the storm. As Sultan, a student in Kashgar, says with a shrug: “There’s nothing we can do about it.”

But there are reasons for thinking resentment is building up below the surface. According to anthropological work by Mr Byler and Joanne Smith Finley of Newcastle University in Britain, a religious revival had been under way before the imposition of today’s harsh control. Mosques were becoming more crowded, religious schools attracting more pupils. Now the schools and mosques are largely empty, even for Friday prayers. It is hard to believe that religious feeling has vanished. More likely a fair bit has gone underground.

And the position of Uighurs who co-operate with the Han authorities is becoming untenable. The provincial government needs the Uighur elite because its members have good relations with both sides. The expansion of the police state has added to the number of Uighurs it needs to co-opt. According to Mr Zenz and James Leibold of La Trobe University in Melbourne, 90% of the security jobs advertised in 2017 were “third tier” jobs for low-level police assistants: cheap, informal contracts which mainly go to Uighurs (see chart). But at the same time as needing more Uighurs, the authorities have made it clear that they do not trust them. Part of the repression has been aimed at “two-faced officials” who (the party says) are publicly supporting the security system while secretly helping victims.



Simultaneously recruiting more Uighurs and distrusting them more creates an ever larger pool that might one day turn against the system from within.

A Han businessman who travels frequently between Urumqi and Kashgar says he used to feel welcome in the south. “Now it has all changed. They are not afraid. But they are resentful. They look at me as if they are wondering what I am doing in their country.” One of the few detainees

released from the camps, Omurbek Eli, told RFA that the authorities “are planting the seeds of hatred and turning [detainees] into enemies. This is not just my view—the majority of people in the camp feel the same way.”



Hasan's warning

China's Communist rulers believe their police state limits separatism and reduces violence. But by separating the Uighur and Han further, and by imposing huge costs on one side that the other side, for the most part, blithely ignores, they are ratcheting up tension. The result is that both groups are drifting towards violence.

Before he disappeared, Hasan, the self-styled Sufi wanderer, expressed Xinjiang's plight. “To be Uighur is hard,” he wrote on WeChat in 2015. “I don't even know what I am accused of, but I must accept their judgment. I have no choice. Where there is no freedom, there is tension. Where there is tension there are incidents. Where there are incidents there are police. Where there are police there is no freedom.”

This article appeared in the Briefing section of the print edition under the headline "Apartheid with Chinese characteristics"

Development of methodology

Development process of this thesis was intuitive, interactive and painstaking. Often it felt like groping in the dark sure that something is there, but not sure how to grasp it. In retrospect it is a relief as well as an encouragement for the future to see how certain idea's and concepts reoccured throughout the process confirming the assumptions set out at the start. Following pages contain a compilaton of schemes, of which each felt like a breakthrough in the process.

A crucial element to my research were the conversations with different tutors and professors as well as interviews I conducted during my field trip. Through the conversations at the faculty, I explored what role different urbanism themes play in my research context and how they relate to each other. Page 229 summarises the insights I gained from various experts I talked to.

Pages 230-231 showcase research summary and questions prior to the fieldtrip. This document also served as a communication tool to invite people for an interview for my research.

Methodology

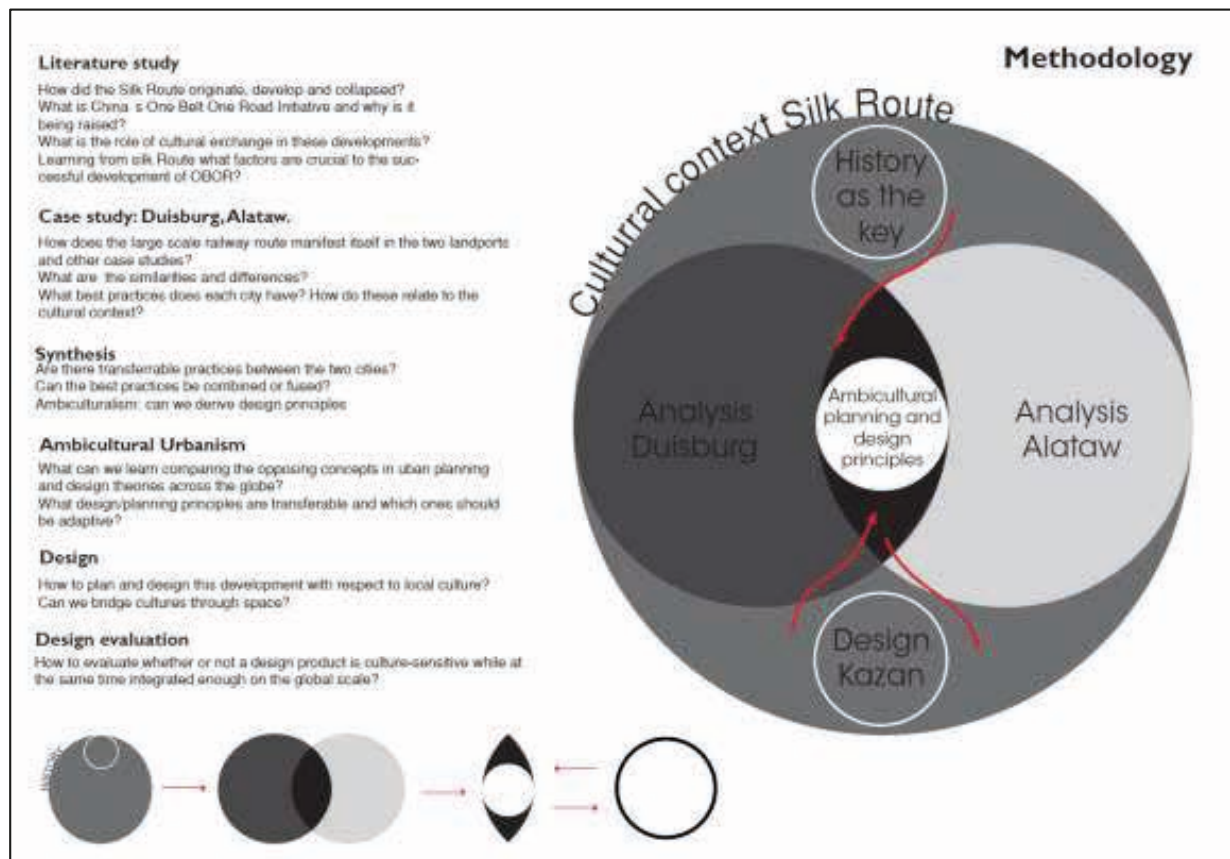


ONE BELT ONE ROAD INITIATIVE



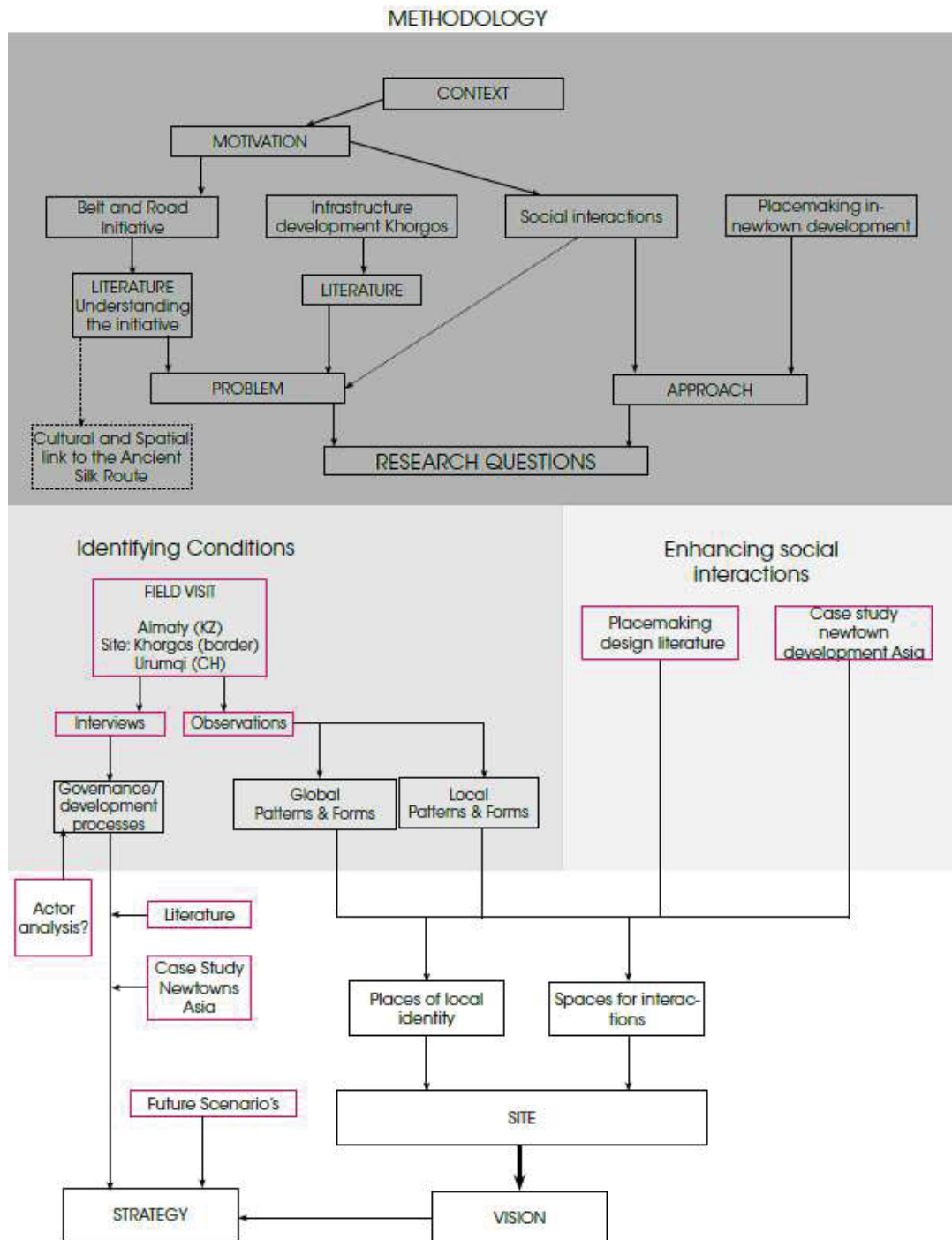
Research topic proposal for studio selection

Methodology



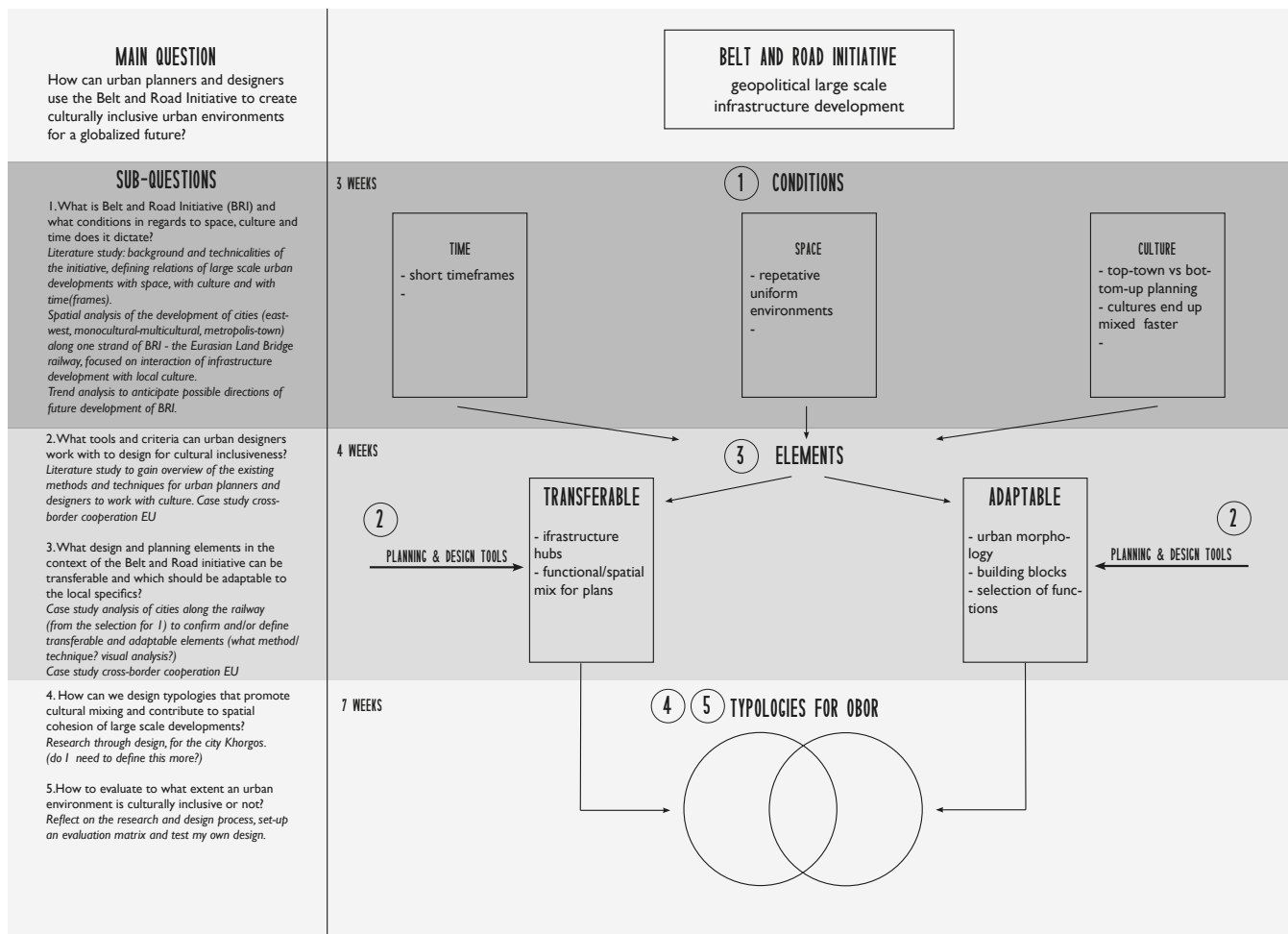
Conceptualisation of theory and methodology at P1

Methodology



Research scope before P2

Methodology



Methodology at P2

How many people did you interview and who were they?

After P2: who I talked with and what did I get out of it.

Interviews with experts in urbanism department

Before field trip:

Qu Lei - culture -> social interactions -> placemaking

After field trip:

Verena Balz -> role of SEZ and regional perspective on its potential position and role. Digital citizenships, thinking about future trends of globalisation.

Marcin Dubrowski -> the prominence of the border in my context and issue. For all this time before I kept it out of my scope, because border studies is a realm that could easily take up my whole thesis and deviate me from my initial interest,. However, the border was an integral and central issue where a lot of other topics came together, so I decided to define and position it finally.

Vincent Nadin - planning on transterritorial scale doesn't hurt. Think in cooperation recommendations and programmes, take a look at European Union. Complementarity principle. Questioning how realistic it is to assume the two halves of Khorgos Gateway, divided by the border can ever function as one integral organism. Recommendation, to further define the problem statement. It was still very broad and ambitious. What did it mean for Khorgos?

Roberto Rocco - structuring my story, narrowing down. Thinking of a structural plan with planning recommendations as a product.

One Belt, One Road for all

An alternative, culture-sensitive approach to globalization-driven infrastructural development in Khorgos.

Location

Khorgos – Special Economic Zone on the border of China and Kazakhstan, along Eurasian Land Bridge Railway.

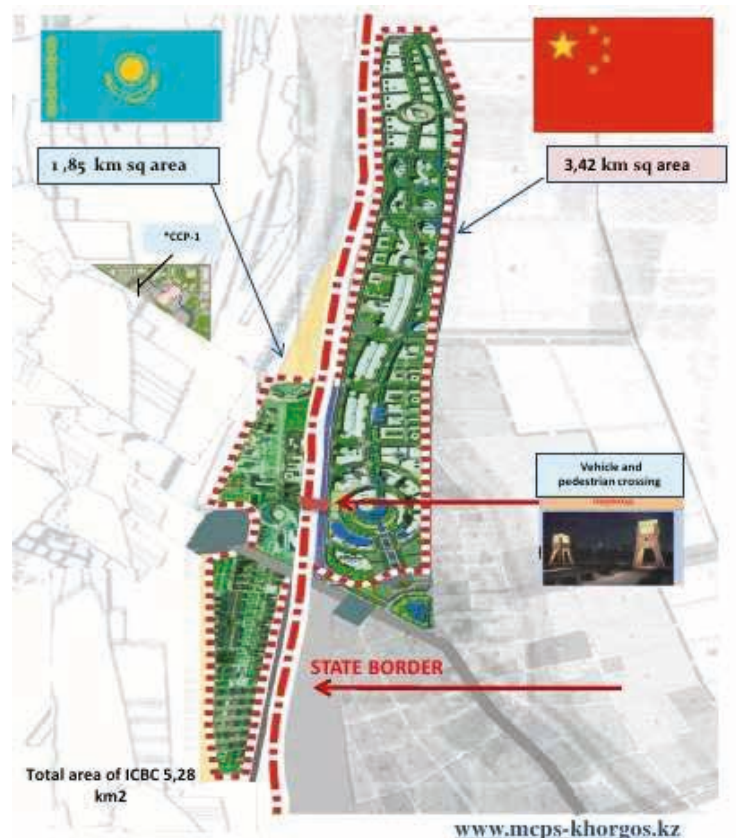
Research goal

Device an (1) alternative planning and design approach to tackle the infrastructure-driven urban development in Khorgos; and propose a (2) plan with a locally embedded urban structure, as well as public places that stimulate social interactions between users of different cultural backgrounds.

Background

Khorgos (Kazakhstan) and **Qorgas** (China) are towns at the Sino-Kazakh border, assigned for development into Eurasia's biggest dry-port and world's first cross-border free trade zone 'Khorgos'. Being of strategic importance for China's Belt and Road Initiative the two towns and the border region between them, are facing fast-paced infrastructural developments in the coming years.

The Belt and Road Initiative (BRI) proposed by China, implies a large scale network of economic agreements and infrastructural routes aimed at connecting China to Europe and strengthening connectivity and trade across Eurasia. The initiative is stimulated through decision-making on national levels, and is actively financed by Chinese economy. As such the BRI is a carrier of globalization,



Field trip preparation

which will pressure the so far mostly untouched region and its local culture to adapt to this change in short timeframes.

Problem

Current proposals for the development of SEZ 'Khorgos', generated and executed top-down, impose strategic functions on to the region without responding to the local (socio)spatial conditions; and without reflecting the local characteristics (identity) of the surrounding region.

Role of Almaty and Urumqi in this research

During the field study, Almaty and Urumqi will serve as conceptual representatives of the regions on both sides of the Sino-Kazakh border. *Main goal is to get a taste of the local cultural as much as possible.* I want to study the governance and development strategies behind new urban developments as well as characteristic urban forms of both cities (how is the city shaped, what are typical characteristics) and typical patterns of the use of space (how is the city used, e.g. use of public space, what are local habits people have in using the city).

Goals of the field study and interviews

Khorgos (interviews, documentation)

1. Confirm the problem statement or define a new one.
2. Understand the way SEZ is organized and what the currently proposed future developments are.
3. Define the challenges/problems the current development faces.
4. Gather as much as possible documentation on SEZ development plans.
5. Identify how local inhabitants view the initiative. What does it mean for them? How do they see the future of this development and the region?
6. Video/photo of the area (landscape, people, infrastructure, buildings).

Almaty (interviews, observations)

1. Find out how the city deals with new urban developments (policies, strategies, organization, actors, top-down vs bottom-up).
2. In what extend does the local government know about BRI and is it somehow involved in it? What does development of Khorgos mean for the local government, the city, and the inhabitants?
3. Video/photo of the area (landscape, people, infrastructure, buildings).
4. Study of characteristic urban forms and typologies (e.g. gated communities or others) in the city.
5. Study the use of public space by locals (and visitors)

Urumqi

1. Find out how the city deals with new urban developments (policies, strategies, organization, actors, top-down vs bottom-up).
2. In what extend does the local government know about BRI and is it somehow involved in it? What does development of Khorgos mean for the local government, the city, and the inhabitants?
3. Video/photo of the area (landscape, people, infrastructure, buildings).
4. Study of characteristic urban forms and typologies (e.g. gated communities or others) in the city.
5. Study the use of public space by locals (and visitors)

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